REPORT

WITH THE CHIEF COMMISSIONER'S REVIEW

ON THE

Forest Administration

ON THE

CENTRAL PROVINCES,

FOR

THE YEAR 1879-80.

NAGPUR:

PRINTED AT THE CHIEF COMMISSIONER'S OFFICE PRESS.

1880.

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No. 710F., dated Simla, the 2nd November 1880.

From—The Honourable C. Grant, C.S., Offg. Secretary to the Govt. of India, Home, Revenue and Agricultural Department,

To—The Chief Commissioner of the Central Provinces.

I am directed to acknowledge the receipt of your Assistant Secretary's letter No. 3524-193, dated the 25th September last, forwarding the Annual Report of Forest Administration in the Central Provinces for 1879-80, together with your review thereon.

2. The areas of the two classes of reserved forests at the commencement and close of the year are returned as follows:—

	Square miles.	
	1st *April* 1879.	31st *March* 1880.
First Class Reserves	2,501	2,535
Second ditto	16,882	16,818

Besides these areas, there are 225 square miles of Government forests not gazetted under the Indian Forest Act, and returned as unreserved forests.

3. A satisfactory feature in the history of forest administration in the Central Provinces has hitherto been, that it has been found possible to maintain an effective protection of the Government forests without many prosecutions for forest offences. During the year under review, however, there has been a considerable increase in the number of prosecutions, which, as explained in paragraph 4 of your orders on the report, was due chiefly to the mistaken action on the part of the Deputy Commissioner of Sambalpur. The President in Council entirely agrees with you that the rules of forest conservancy should be introduced gradually and cautiously, and that their operation should be most carefully watched.

4. The measures taken to ensure the protection of the forests against fire have again been extended over a larger surface than in previous years; the figures being as follows:—

	Acres.	
	Attempted.	*Protected.*
1876-77	517,890	504,824
1877-78	702,310	575,304
1878-79	749,319	691,363
1879-80	827,470	715,773

But the failures were numerous, large areas previously protected were burnt, and you have justly drawn the Conservator's attention to the subject. It is much to be regretted that fires passed through some of the forests which had been successfully protected during a series of years. Among these have been noticed 37,120 acres in the Banjar forest, which had been protected since 1875, the whole of the Barela reserve of 7,153 acres, protected since 1872, and large portions of Chandgarh, Bawargarh, Kamapur and the East Pench Reserves. It seems to be a matter for serious consideration whether the Conservator has not undertaken a larger task than, with the staff at his disposal, he can do justice to. The administration of forests in the Central Provinces has for many years past been distinguished by marked success in fire conservancy, and it is creditable to the Conservator that nearly one-half of the total area of the first class reserves is now protected from fire; but, in order to be of real value, protection must be continuous, and, before further extensions are attempted, it is necessary to make quite sure that the forests previously taken in hand are safe.

5. The total outlay on this work since the commencement has been Rs. 1,00,969, and the outlay during the year was Rs. 12,434, or on an average Rs. 17 for 1,000 acres. The outlay per 1,000 acres was largest in the Ahiri Teak forest, where the growth of grass is very heavy (Bimaram Rs. 96, Mirkullu Rs. 107), and least in some of the large reserves in the drier parts of the Satpura Hills (Rajaborari Rs. 5, Saonligarh Rs. 4, Kalibhit Rs. 4).

6. Night frosts were exceptionally severe during the year under review, not only in the Central Provinces but also in the adjoining forests of Berar; and it is evident, from what the Conservator states in paragraphs 58, 123 and elsewhere in his report, that, in planting as well as in the improvement cuttings, the greatest caution must be used to leave sufficient shelter against frost for the young growth. The list furnished by Mr. Fernandez, in which the principal forest trees of Nimar are arranged according to their susceptibility to frost, is interesting, and I am directed to suggest that the information may be completed by compiling similar lists for other districts.

7. The results of the improvement cuttings in the Punassa reserve, recorded in paragraphs 118 to 127 of Major Doveton's Report, are not very clearly stated. If the figures are correctly understood, a cutting extending over an area of 480 acres was made between the 1st April 1879 and 31st March 1880, the outturn being 2,500 cubic feet of timber and 22,870 cubic feet of fuel, which would correspond to 5 and 47 cubic feet, total 52 cubic feet per acre. Paragraph 120, however, returns the marketable produce, cut per acre, as 14 cubic feet of timber and 127 cubic feet of fuel. Again, in paragraphs 125 and 126 Major Doveton speaks of a second cutting of 110 acres, the outturn of which was 1,200 cubic feet of timber and 59,800 cubic feet of fuel, corresponding to 11 and 543 cubic feet per acre respectively. But in the last clause of paragraph 126 the Conservator states the average outturn per acre of this cutting to have been 4 cubic feet of timber and 200 cubic feet of locomotive fuel.

8. The organization introduced in 1877, under which district forest officers were to be attached to those districts in which the forests are of sufficient importance, and were to have charge under the Deputy Commissioners of what are now the second class reserves, and under the Conservator of the first class reserves, was expected, among other advantages, to promote a better administration of the large areas which were then called unreserved forests. From the remarks recorded in paragraph 15 of your review, however, it would seem that your expectations in this respect had not in all cases been realized. The President in Council fully concurs with you in regarding the proper management of the second class reserves as a matter of great importance, both to the Government and to the people. The chief difficulty doubtless consists in the large extent of these forests, and in the fact that they do not, like the first class reserves, consist of a limited number of compact blocks, but of a large number of pieces of irregular shape varying in size, interspersed with cultivation and with private forests.

9. In paragraph 11 of your review you draw the Conservator's attention to the question whether it might not be of advantage to take under the direct control of the department forest tracts near large towns, with the view of making them permanently productive as forest-bearing areas. The suggestion is one of importance, and such areas, if they exist near towns, near groups of large villages, or in the vicinity of densely-populated districts, might be set apart and treated as first class reserves.

10. Major Doveton deserves credit for the progress which has already been made in the Central Provinces in utilizing the first class reserves for supplying the requirements of the people in their vicinity. It is satisfactory that he has even succeeded in permitting the pasture of cattle on a large scale in these forests without apparently interfering with their protection

from fire. The following figures which are extracted from his report are interesting, as they show the number of cattle sent for grazing during the year into some of the first class reserves:—

	Buffaloes.	Cows and bullocks.	Sheep and goats.	REMARKS.
First Class Reserves.				
Mandla Division ...	476	4,594	12(*c*)	(*a*) Buffaloes and camels.
Hoshangabad Division ...	6,717	35,174	770	(*b*) Cows only.
Nimar " ...	10,013(*a*)	19,720	1,022	(*c*) Goats only.
Chanda " ...	421	6,118(*b*)	355(*d*)	(*d*) Sheep only.
Seoni " ...	4,454	20,385	5,699(*e*)	(*e*) Goats only. In addition to these numbers, 37,200 head of cattle of all kinds were grazed on license for short periods.
Saugor " ...	2,714	10,237	56(*f*) (sheep only)	(*f*) Also 2,404 ponies and donkeys.

In utilizing the produce of the reserved forests, the Conservator has shewn that, when areas are taken up for strict conservation, it does not follow that they should be finally closed against pasture and cutting. On the contrary, as soon as the forest growth in the protected areas becomes really thick, large quantities of produce can be made available for towns or villages in their vicinity. Hence it is clear that to set apart blocks of forest near large towns and villages does not imply that they will be closed and that their produce will not be utilized.

11. From the extracts given in paragraph 232 from Colonel Thompson's report regarding the second class reserves in Damoh, some progress appears to have been made in that district in the selection of suitably-situated blocks, to be strictly protected and improved. The selection of such areas should now be taken in hand on a systematic plan in all districts. The subject has repeatedly been discussed on previous occasions. In the orders on the report for 1873-74, the Government of India said that the permanent reservation of defined though limited areas would prove more beneficial to future generations than the probably fruitless attempts to preserve the forest in wide tracts of country, over the greater portion of which cutting, grazing and burning must be permitted. Attention was drawn to the fact that the reserves of the Central Provinces were so unequally distributed over the country, that they would only suffice to satisfy local demands in a few districts. It was suggested that the requirements of each group of villages should be considered in detail, and that, as soon as the enquiry in one district had been completed, a report should be submitted with specific proposals for the demarcation of strictly protected blocks in that district.

12. And in paragraph 14 of your orders on the report for 1875-76, when speaking of the proposal to add the best portion of the unreserved forests to the reserves, you said:—"It may suffice at first to mark off the selected area and give it entire rest, withdrawing it from those lands from which the rural and urban population draw their supplies, and then, should circumstances permit, the regular department can assume charge and commence measures of improvement and renovation."

In his report for 1876-77 the Conservator observed that in many instances the Government had, within easy reach of the more thickly-populated country, tracts of forest land which at that time were comparatively unproductive, and he advocated that the most advantageously situated of these lands should be taken in hand by the Forest Department. And in paragraph 39 of your orders on that report, you urged the formation of new reserves in areas easy of access.

13. It would be premature now to enter upon any speculations regarding the future management of the second class reserves, but eventually the best plan may be to set apart selected blocks in the vicinity of towns and large villages to be permanently maintained as forest, while the remainder will either be used for the extension of cultivation, or will be available to furnish pasture and fuel. If this view is correct, that eventually grass, bamboos, building wood and timber will, as far as Government forests are concerned, chiefly be supplied from the first class reserves, while the second class reserves will mainly furnish pasture and fuel, then it ought not to be impossible, after collecting the needful data, to determine the extent of land which should and may be set apart in each district as first class reserved forest in the vicinity of towns and populous tracts.

14. The first step in such an enquiry would be to ascertain approximately the number of cattle which, on an average, graze in these areas during the year, the quantity of firewood furnished and the annual yield of the areas in bamboos, timber and wood for agricultural and domestic purposes. The data recorded on these subjects in the annual reports are incomplete, and it would be well if the Conservator would in future reports attempt, as far as possible, to give a complete account of the amount of pasture and all descriptions of forest produce yielded by both the first and second class reserves. In those districts where the system of commutation still exists, it would be necessary to supplement the facts by an approximate estimate of the produce drawn from the forests, under that system. The following figures which are extracted from Major Doveton's Report, show the number of cattle grazed on annual licenses in the second class reserves of those districts, for which data are given :—

	Buffaloes.	Cows and bullocks.	Sheep and goats.	REMARKS.
Second Class Reserves.				
Nagpur District ...	20,575 (*a*)	112,903 (*a*)	40,827 (*a*)	(*a*) Of these, there were grazed on license for short periods 13,915 buffaloes, 22,422 cows and bullocks, and 16,769 sheep and goats.
Saugor " ...	41,218	176,557	14,303	
Seoni " ...	2,745	166,568	4,066 (*b*)	(*b*) Goats only.
Hoshangabad District ...	35,316 (*c*)	177,420 (*c*)	35,252 (*c*)	(*c*) Of these, there were grazed on license for short periods, 11,025 buffaloes, 97,165 cows and bullocks, and 33,654 sheep and goats.
Nimar " ...	27,854	106,479	6,351	
Chhindwara " ...	115,556	25,088	7,734	

15. Paragraphs 25 to 44 of the report are occupied by a comparison of the actuals with the sanctioned estimates. The Conservator states that this

is required by the Government of India. There must, however, here be some misconception of orders, which should be corrected. On several occasions it has been pointed out by the Government of India that the comparison of actuals and estimates is a matter of purely temporary interest which need not have a place in the annual progress reports. Major Doveton probably refers to the orders contained in the Circular Resolution of this Department, No. 9F. of the 10th May 1880, directing the discontinuance of the separate statements of actual receipts and charges, and requesting that a brief explanation of important deviations from the Budget Estimates should in future be added to the explanatory note which accompanies those Estimates.

16. Paragraph 18 will be brought to the notice of the Comptroller General. It is not understood under what circumstances a sum of Rs. 30,966, representing the adjustment of excess debits for which the Forest Department of the Central Provinces has been directed to take credit, but which, as the Conservator says, has no connection with the transactions of the year, should have been included under revenue. It is noticed that the Summary of Receipts and Charges, and the Account-Current do not bear the signature of the Assistant Comptroller General (Forests).

The President in Council is glad to observe that you have acknowledged Major Doveton's services in promoting the efficiency of the Department.

No. 711F.

COPY, with a copy of the Report, forwarded to the Comptroller General, with reference to paragraph 16.

G. C. B. Press, Simla.—No. 765 H., R. & A. D.—6-11-80.—850.

No. $\frac{3318}{192}$

FROM

J. W. CHISHOLM, ESQUIRE,

SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces,

To

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpur, the 9th September 1880.

SIR,

I am directed to convey the following remarks and orders on your Forest report for 1879-80 received with your No. B-61, dated 25th ultimo.

2. You return the area of the Government forests at 12,549,861 acres, or 19,609 square miles. Of this, 2,535 square miles are included in the 1st class reserves, 16,848 square miles in the 2nd class reserves, and 226 square miles are unreserved forests. The main change of the year was the transfer from 2nd class to 1st class reserves of over 30 square miles of forest situated in the Hoshangabad and Betul districts. The policy of Government has been declared* to be to improve, conserve and gradually extend the forests of the 1st class, while those of the 2nd are intended "to supply the wood, pasture and "forest produce required by those classes of the population who cannot supply "their wants from other sources."

*Home Department No. 877F, dated 30th October 1879.

3. The boundaries of the protected forests notified under the Indian Forest Act of 1878 are reported generally to be in good order and well defined, and though little can yet be said regarding the operation of the new Forest Act, it is believed that the rules circulated under the Act are adequate to meet all present requirements.

4. You note (paragraph 6) on the large increase of prosecutions for forest offences which have risen from 367 to 1,408. The large increase is chiefly in the Sambalpur district and was remarked on in the Criminal Administration report. On these prosecutions the Commissioner remarks that while they "were perfectly "legal, the course pursued by the Deputy Commissioner in persisting in enforc-"ing rules, which he should have seen were unsuitable, was mistaken, and has "resulted in discontent among the people, and in a considerable decrease of "forest revenue." The Chief Commissioner would call the attention of all officers to the orders issued with this office Circular No. 4 of 1873 which require "that even the primary rules of forest conservancy should be nowhere too rigor-"ously insisted on at first, that their introduction should be gradual and cau-"tious, and that their operation should be ceaselessly watched, so as to admit "of immediate relaxation, where, from local circumstances, they are found either "to press unduly on the people, or to create serious or permanent discontent." It is believed that neither District nor Forest officers overlook the truth that "the perfect working of the forest rules is of less importance than the content-"ment of the people," and that in Sambalpur quite an exceptional course was followed, necessitating the interference of the Commissioner, who arranged on the spot the relief that should be given. As a rule, the prosecutions in districts are not numerous, nor are the offences committed usually of a serious kind.

5. The forests protected from fire are returned as covering 715,773 acres, being nearly 24,000 acres in excess of the previous year, and the cost incurred as 12,434, or over Rs. 11 per square mile. The arrangements made, however, were altogether far from successful, and several instances are given of serious

fires which occurred in the reserves. In the Chhattisgarh Division nearly the whole of Kantera nala and part of Hathibari were burnt (paragraph 47). In the Mandla Division "several fires occurred, burning the Barela reserve, which had "been protected for seven years, and no less than 37,120 out of 49,495 acres in "the Banjar" (paragraph 56). In the Hoshangabad Division there were several independent fires, in the Betul Division there were two serious fires, in Chandgarh and Punassa of Nimar there were several, and in the Seoni Division there were seven. The failures were therefore numerous, and in some cases resulted from neglect on the part of the subordinate forest establishment. The injury done to the forest by fires is so great that the matter deserves your careful consideration in order that special steps may be taken for more effectually protecting in future the areas arranged for. The circumstances of the past season may have been particularly adverse, owing to large areas of grass having become dry and combustible earlier than usual. It is feared, however, that failure frequently resulted from adequate precautions not having been taken to guard against the spread of fires, and the Chief Commissioner looks to you to prevent a recurrence of this.

6. Notwithstanding that grazing has been allowed in a large area of the forests under protection from fire, only one fire has resulted from the carelessness of a cowherd. This was in the Hoshangabad Division. It may be said generally, then, that the concession made as regards grazing does not increase the risk of fires in the forests.

7. The receipts and charges for the year compared with 1878-79 are given as under :—

		1879-80. Rs.	1878-79. Rs.
Receipts	...	10,06,723	8,52,862
Charges	...	5,22,573	3,93,715
Surplus	...	4,84,150	4,59,147

This is the complete financial account of the department, as detailed in Annual Form No. 49, but it includes items which, as you explain, have no connection with the actual forest transactions of the year. Viewing the transactions of both years separately, for the 1st class reserves under the direct control of the Forest department, and the 2nd class reserves managed by District officers, the results stand as follows :—

	1879-80.			1878-79.		
	1st class reserves.	2nd class reserves.	Total.	1st class reserves.	2nd class reserves.	Total.
Receipts...	2,84,103	6,90,091	9,74,194	2,22,953	6,29,909	8,52,862
Charges ...	3,11,511	2,08,670	5,20,181	2,19,739	1,73,976	3,93,715
	—27,408	+4,81,421	+4,54,013	+3,214	+4,55,933	+4,59,147

The actual surplus on the year's transactions is Rs. 4,54,013, as compared with Rs. 4,59,147 in the previous year. In the 1st class reserves there is a deficit on the year's management of over Rs. 27,000. The revenue has increased, but this increase has been more than absorbed by the great advance in expenditure. In the 2nd class reserves also the expenditure has increased, but this has been accompanied by an advance in receipts much in excess of the advance in charges.

8. Much of the expenditure in the 1st class reserves is on conservation and improvement, yielding no present return, and the benefits of which remain to be reaped in the future. The full details of what has been done in this respect in each forest division, and of the general operations of the year, are contained in paragraphs 45 to 184 of your report. In regard to the working of the establishment in the 1st class reserves, it is unnecessary to repeat in this place what you have treated with sufficient clearness and fullness, but I am to remark that in dealing with the financial result in different divisions, the separation of an amount as chargeable to conservation and improvement seems in most cases a mere estimate of a more or less arbitrary character, while the enhanced value of stock resulting from the year's operations represents a value which, after all, may never be realized. Thus in the 1st class reserves out of the total expenditure of Rs. 3,11,511

the work of protection and improvement is shown as costing Rs. 77,847, and the value of stock is returned as increased by Rs. 77,537. There is, however, so much of uncertainty about estimates of this kind that the Chief Commissioner questions if they are of much value. The statistics should merely be viewed as an approximation based on estimates, for they do not supply facts on which reliance can be placed.

9. Improvement cuttings occupy a prominent place in the work of the year in the 1st class reserves, and have been carried on extensively in the Punassa, Hoshangabad, Seoni and Ahiri forests. It is also reported that the cuttings generally of previous years have made excellent progress, having a good effect on the forests, and enhancing the value of the growing stock. At the same time there has been some loss from severe frost to which young coppice is specially susceptible, and the list of trees, in the order of their susceptibility, given from Mr. Fernandez in paragraph 124, affords valuable information to Forest officers.

10. Nothing very noticeable is recorded in connection with artificial stocking. The sowings carried out seem to have been unsuccessful in Hoshangabad (paragraph 93), and to give little promise in Nimar (paragraph 131). On the other hand, bambu planting in Saugor promises well (paragraph 177), and you note that if as successful near the town of Garhakota, as there is a prospect of its being, within six years an appreciable annual income will be added to the forest revenue. Near all large towns there is a great field for increasing revenue in this way if the subject only received proper attention from forest officers, while such an arrangement would be of immense convenience to the people.

11. It is important that the Forest department, as a great spending department, should carefully consider every means of adding to the revenue by improvements in forest tracts directly under its control. In this connection the Chief Commissioner desires me to draw your attention to paragraph 5 of the orders of the Government of India on the Forest report for last year, requesting "that in the "selection of new areas to be permanently maintained as forest it should be specifically kept in view that they ought to be in the vicinity of populous tracts "and easily accessible. This principle was to some extent disregarded when "the 1st class reserved forests were selected, and hence they are mostly situated "in remote localities, thus increasing the difficulties of working them, and preventing them yielding that revenue which might otherwise be obtained by "them." The matter is not specially referred to in your report, but you might well consider whether tracts are not available near considerable towns in these Provinces which it might be of advantage to take under the direct control of your department to be rendered permanently productive as forest bearing areas.

12. It is the remoteness and inaccessibility of most of the forests from markets that must for years prevent a yield in keeping with their capabilities. Thus in the Mandla forests alone the deficit last year was over Rs. 20,000. You remark that in this case, and in that of other forests also, the produce retained is practically a capital reserved with a view to a larger profit hereafter. Even under the most favourable aspect, however, it is a capital locked up and yielding nothing. You show that progress has been made in opening out communications for facilitating the transport of timber, and the works on the Banjar are reported to have stood very heavy floods, and to be in every way satisfactory, (paragraph 63).

13. The out-turn of work at the Ahiri forests is given in paragraph 147, and a large number of sleepers was delivered for the Chhattisgarh Railway. Sawing operations seem to have proceeded uninterruptedly, the machinery having been increased by two 16 H. P. engines. The deficit on the year's working in the Chanda Division is nearly Rs. 30,000, but allowing for the increased value of plant and stock resulting from the expenditure incurred you show a considerable profit.

14. The result of the administration of the 2nd class reserves is dealt with in paragraphs 185 to 281 of the report. The comparative receipts and charges of the several districts for the past two years are as follows :—

Districts.	Income, 1878-79.	Charges, 1878-79.	Income, 1879-80.	Charges, 1879-80.
	Rs.	Rs.	Rs.	Rs.
1. Nagpur	25,148	12,191	30,611	14,105
2. Bhandara	48,747	3,052	41,078	3,644
3. Wardha	27,671	8,246	29,134	12,935
4. Balaghat	25,718	5,578	26,956	5,721
5. Chanda	70,988	8,771	69,106	17,944
6. Jubbulpore	17,728	6,969	19,769	7,374
7. Saugor	43,061	14,681	50,557	17,659
8. Damoh	45,942	10,180	43,330	11,114
9. Seoni	45,454	11,228	50,143	11,302
10. Mandla	43,320	8,017	96,157	10,297
11. Hoshangabad... ...	39,830	15,555	47,393	18,554
12. Nimar	38,188	15,609	37,873	17,883
13. Betul	36,333	15,868	30,970	15,145
14. Chhindwara	29,887	13,614	26,661	12,601
15. Narsinghpur	12,546	3,655	9,896	3,077
16. Raipur	50,630	6,581	52,805	6,695
17. Bilaspur	15,956	2,427	17,924	2,306
18. Sambalpur	12,757	1,660	9,726	2,880
* Total ...	6,29,904	1,63,882	6,90,089	1,91,236

15. There is little to be gathered from your comments on the causes underlying fluctuations of income, or on the relative success or failure of the different systems of management pursued in districts. In the case of some districts your remarks are markedly meagre, and supply simply the figures furnished by District officers. The Chief Commissioner is not satisfied that the management of the 2nd class reserves has yet in all districts been placed on an efficient footing. Sometimes the revenue suffers from unsuitable arrangements, or the existence of inadequate checks. At others the people are harassed by excessive rates or difficulties connected with licenses. And lastly in certain tracts the forests are injured by systems encouraging waste, or by the absence of any well considered plan of working by rotation. The proper management of the 2nd class reserves is so important both to the Government and the people that an early opportunity should be taken for scrutinizing the detailed arrangements in districts, and remedying defects of system wherever these are found to exist.

16. It will be convenient to refer to the forest management of the year in each Commissionership. There is a considerable increase of income in the Nagpur district, and a large decrease in Bhandara. In the remaining districts, Wardha, Balaghat and Chanda, the fluctuations are inconsiderable. The increase in Nagpur is not explained, but it is noted that something requires to be done "for the more systematic management of the forests." It is promised that the matter will be taken up as soon as possible, and clearly the defects, whatever they are, should admit, in the head quarter district, of an early remedy being applied. The decrease in Bhandara is attributed in the main to commutation being abolished. As the demand has probably not materially changed it is possible that the district rates for specific quantities being unsuitable the wants of the people are largely supplied from private forests. The 2nd class reserves in Bhandara are described as reduced to a very bad condition, but it is feared that owing to want of establishment the steps necessary to be taken to bring about improvement must lie over. It is so essential that timely arrangements should

* The details giving these totals are gathered from the report and statements and there are differences which cannot be reconciled in this office.

be made for the improvement of these forests that I am to request that a special report be submitted containing definite proposals for their protection. No explanation is offered of the heavy increase in the charges of management in Chanda from Rs. 8,771 to Rs. 17,944, and in Wardha from Rs. 8,246 to Rs. 12,935. The tendency to increasing expenditure cannot be too carefully watched Already in the Nagpur and Wardha districts the expenditure is 46 and 44 per cent of the forest receipts, while in Bhandara it is only 9 per cent. The pressure of the charges in different districts is greatly influenced by the systems in force for realizing the revenue, by the cost of European supervision, and by the relative strength of protecting establishments in the case of compact and scattered forest areas. It would have been satisfactory if these points had been referred to in the case of all districts as causes affecting the marked disproportions in charges. In regard to the systems of management duties are now generally taken on actual produce as removed from the forests, though commutation is still maintained to a considerable extent in Balaghat and Chanda.

17. In the Jubbulpore Commissionership there is an increase of revenue in all districts except Damoh, and no marked increase in charges, except at Saugor, due apparently to the inclusion of two-thirds of the control charges, the district forests absorbing much of the Divisional officer's time. The larger establishment employed in Mandla has been followed by a large advance in receipts, *viz.* from Rs. 43,320 to Rs. 96,157. Much of this great increase is due to a more complete check on the grazing of cattle, and is an illustration of the loss the revenue has suffered from the existence hitherto of inadequate checks. In the same way there has been a large increase under grazing in the Saugor district, which is entirely attributed to more efficient arrangements having been made to prevent evasion. These instances serve to show how necessary it is to scrutinize with some care the efficiency of the existing arrangements for check in all districts. As far as can be gathered from the report the revenue is realised by commutation in Saugor, Damoh and Seoni, and by issue of licenses for produce removed in Jubbulpore and Mandla. Some revision of the arrangements where commutation still exists seems called for, and in Seoni there have been a number of cases of abuse of the commutation licenses. Such cases involve a considerable loss of revenue to Government, for a small proportion only are discovered. It was a mistaken procedure to allow the cases to be compounded.

18. In the Nerbudda Division the general system in all districts is the removal of produce under licenses. There is an increase of receipts in Hoshangabad and a decrease in the other districts, while there are no marked fluctuations in the charges, except an increase of nearly 20 per cent in the expenditure of the Hoshangabad district, which is not accounted for. The general decrease in revenue in this division may be due to unsuitability in some of the details of the license system in force, but no information is supplied on which to base an opinion. Strong measures should be taken against license vendors conniving at forest offences as mentioned in paragraph 251, while the forest establishment should not be allowed to act against landholders for breaches of forest conservancy, the duty of the subordinates being limited to submitting reports for the information of the Deputy Commissioner.

19. In the Chhattisgarh Division there is no forest officer, and the Commissioner remarks that much requires to be done "towards closing and "restoring such portions of the forests as have been overcleared."

The question is important both from a revenue point of view and in the interests of the people. There is a large population, covering an extensive tract of open country, with a demand for all kinds of forest produce now large, and likely to increase. Within the last few years the drain on the accessible forest areas has doubtless been very great, and so soon as an officer is available steps should be taken for the due protection of these forests. Every year's continued reckless cutting merely increases the difficulty of future improvement. During the past year there were no marked fluctuations either in the revenue or charges of the Raipur and Bilaspur districts. The considerable decrease in Sambalpur is reported by the Commissioner to be due to the rules in force for the removal of produce being unsuitable. These have been modified, but it is noted that the cost of the establishment absorbs nearly a third of the receipts.

20. Sufficient has been said on the general administration of the 2nd class reserves to show that much remains to be done before the arrangements

in all districts can be pronounced as suitable to the people, and of full advantage to the Government, in realizing the highest possible revenue consistent with the proper preservation of the forests. The Chief Commissioner considers that there has been great progress in adapting systems to local requirements, and in preventing the wanton destruction of forest areas. But with the experience that has now been gained of the results of different systems it should be possible to frame rules for management capable of general application which would ensure uniformity as to principles no longer open to discussion, and merly leave, as points of variance, minor matters of an unessential kind. It is believed, for instance, that there is almost a unanimity of opinion that commutation is a bad arrangement for the forests, and is not an essential condition for supplying the people. For exceptional reasons only therefore should it be allowed to continue. The whole matter deserves the full consideration of yourself, and of all officers connected with the management and control of district forests.

21. The Chief Commissioner has read with interest your remarks on the operations carried on in the Telunkheri estate in paragraphs 282 to 286, and on the results attained in the cultivation of exotics described in paragraphs 292 and following paragraphs. The Mahogany seed received in 1879 is said to have been nearly all bad, but the stock previously put out appears to be doing fairly well, and at Nagpur there are two trees 18 and 20 feet. There has been success with the Carob at the top of the Korai ghat, and also at Chanda. On the other hand, the Mesquit bean has only succeeded at Garhakota, and of the Eucalyptus saligna only a limited number of seedlings have been raised.

22. The injury done by frosts is mentioned as a source of considerable anxiety, and an instance is given of a plantation of nearly 60,000 teak, with grass round them, two-thirds of which were destroyed, presumably by frost. The increased humidity of forests protected from fire especially with large areas covered with grass, tends doubtless to add to the intensity of frosts, and as a result young trees with grass above them must suffer severely. As the fact is one which seems beyond dispute it will be for your department to take such steps as are possible to deal with the difficulty.

23. The forest work has suffered from the paucity of officers. No less than five officers left, of whom only one was replaced, and as a result charges had to be amalgamated, and two divisions were placed under a forest ranger. It follows that the work in some divisions could not receive proper attention, while the Bhandara district and the whole of the Chhattisgarh Division remain without the services of any Forest officer. The Chief Commissioner hopes that it may be possible for the Government of India to keep up the forest staff of these Provinces at its full strength.

24. The question of the modifications necessary in the grades of the subordinate establishment and the increase in the number of forest rangers will be dealt with on the receipt of the special report promised on the subject.

25. I am to draw your particular attention to paragraph 2 of Government Resolution, Home Department, No. 7F. dated 27th February last, intimating that "method and arrangement" are alone required to ensure the despatch of Forest reports by required dates. The practice in your office is to submit the annual report late, and the Chief Commissioner, so far from considering the delay in the present instance unavoidable, as urged by you, cannot but regard it as discreditable, and attributes it to absence of foresight and system in seeing to the timely preparation of the returns. It is expected that effectual efforts will be made to obviate similar delays in future.

26. The acknowledgments of the Administration are due to the officers specially mentioned by you, and to yourself for your services in promoting the efficiency of the department.

I have the honor to be,

Sir,

Your most obedient Servant,

J. W. CHISHOLM,

No. B-61.

FROM

MAJOR J. C. DOVETON,

CONSERVATOR OF FORESTS,

Central Provinces,

To

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpur, the 25th August 1880.

SIR,

I have the honor herewith to submit the Annual Report on Forest administration for the past year.

It is with regret that I have for the third successive year to acknowledge a want of punctuality in the submission of the report. The delay has, however, been unavoidable, and is due to the amount of other work that had of necessity to be performed before the annual returns could be prepared. In explanation of this fact, I can only solicit attention to this office No. B-42 of 3rd ultimo.

I have the honor to be,

Sir,

Your most obedient Servant,

J. C. DOVETON,

Conservator of Forests,

Central Provinces.

CHAPTER I.

Summary of administration for 1879-80.

1. Before proceeding to summarize the record of the past year's administration, it is necessary to advert to the very serious loss the department sustained in being deprived from various causes of the services of no less than five officers. But one of these officers could be replaced by transfer from other Provinces, and four divisions were consequently deprived each of an officer of the superior staff. The charge of two divisions had to be amalgamated each with the charge of another existing division, and the charge of two divisions had to be allotted to a forest ranger.

2. The area of the 1st class reserves has been increased by the additions detailed in Chapter II. aggregating 21,188 acres, that of the 2nd class reserves has been reduced by the alienation of 800 acres in Mandla, the correction of an error in the return for Nagpur of 213 acres and the transfer to the 1st class reserves of 21,188 acres in Hoshangabad and Betul, while to the unreserved forests has been added 1,934 acres, being the area of clearance lease plots resumed in Nagpur, and 114 acres being the area of a plot of land purchased in Chanda with the view of adding it to Moharli reserve, but which has not yet been declared reserved forest.

3. As recorded in Chapters II. and III. a certain amount of demarcation work has been done, all boundaries have been maintained, and with trifling exceptions those of the 1st class reserves are in good order, while many of the boundaries of the 2nd class reserves are reported to be well defined.

4. The area of the Government forests is returned in Forms 45, 45A. and 45B. and at the close of the year stands thus :—

	Acres.
1st class reserves ...	16,22,454
2nd class reserves ...	1,07,82,991
Unreserved forests ...	1,44,416
Total ...	1,25,49,861

5. Regarding the operation of the Forest Act little can at present be said, for it was not until the close of the year that rules under the Act were drawn up and approved. The rules that have now been sanctioned have been derived from those which it is believed have been adopted in the North West Provinces. They are brief and comprehensive, and in almost every respect are calculated to meet present requirements.

6. The prosecutions for forest offences are returned separately for each division in Form 48. The following is a comparative statement of prosecutions and convictions for the past two years :—

Year.	Prosecutions.		Convictions.		Percentage of convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1878-79	367	626	338	528	92·1	84·3
1879-80	1,408	2,718	1,302	2,484	92·5	91·4

This statement shows a very striking increase, but it is not general nor is it really so large as it appears. The great increase is in Sambalpur, where in 746 cases 1,015 persons were prosecuted, and in 696 cases 937 persons were convicted. Regarding these prosecutions nothing more need be said as the subject has already been referred to in the Judicial Administration report for 1879. The next largest return is for Jubbulpore, but it is evident, that cases in which there was no prosecution, have by mistake been included in the return. If for both years the prosecution in Sambalpur and Jubbulpore be left out of account we have for 1879-80, 938 persons prosecuted in 484 cases against 444 in 253 cases in the previous year. It must be admitted that the increase is still large, though the number of prosecutions does not in itself appear excessive.

7. As shown in the remarks on each division there were several serious failures in the protection of forests from fire; still it will be seen from Form 47 that the area protected is nearly 24,000 acres in excess of that of the previous year, and that 715,773 acres have been protected at a cost of Rs. 12,434 or Rs. 11-1-10 per square mile. The fires that have occurred are much to be regretted and in some cases reflect discredit on the forest establishment, but it has to be remembered that the season was peculiarly adverse. Even before the hot season commenced extensive areas of grass land were rendered dry and combustible by frost, and in many cases there was consequently great difficulty in the clearing of boundary lines. The sudden reduction of the staff of superior officers also overtaxed the subordinate establishment.

8. The failures referred to afford more abundant evidence of a weak point in the organization of the subordinate staff and will lead to proposals for increasing the number in the upper grades and reducing that in the intermediate grades.

9. In a very large area under protection from fire, the grazing of cattle was permitted and there was only one instance of any accident resulting therefrom.

10. Some years have now elapsed since improvement cuttings were first commenced. They began with the cutting over of badly grown teak with the view of replacing the inferior produce removed by straight poles of a greater value, but by degrees these operations have become more worthy of the designation assigned to them. During the past year, for instance, on 450 acres in Punassa, a complete cutting was made in which every thing that it was not desirable to reserve was cut and removed. Similarly 3,360 acres in Hoshangabad and Seoni were treated though not on so perfect a system, the cutting being, except on a small area in Rajaborari, confined to the cutting back of badly grown teak and the removal of creepers, and obstructions to the existing crop of the more valuable species. In Ahiri also cuttings have been made with the view of increasing the production of teak.

11. The regrowth from the cuttings of previous years has with very trifling exceptions made excellent progress and the effect on the forest and the value of the growing stock is very satisfactory.

12. The artificial propagation of forest species has been restricted owing to the short supply of seed. 282 acres were sown with teak and other species, 106 acres with teak and bambu and about 540 acres with bambu alone, 50 acres were also sown with bambu in "situ," and bambu nurseries covering about 20 acres have been formed to supply stock for future plantings. Some of these operations are known to have been very successful, in others the results cannot yet be recorded. The sowings of previous years though they have not proved so successful and generally have not progressed as well as was at first expected show fair results and will repay the outlay on them.

13. The system of working the first class reserves varies in different parts of the Provinces, and there are still some reserves that are not worked at all or only slightly. It may be said that with due regard to the requirements of the

people, the object kept in view, has been the conservation and improvement of the forests, which has been secured to the full extent that circumstances rendered practicable. There is of course a wide field for improvement, but such improvement can only gradually be effected.

14. As regards the 2nd class reserves, it is to be observed that the tendency of the improvements in revenue management has been to secure greater protection to, and consequently the better conservation of these forests. In Sconi some progress has been made in dividing off the forests to be worked in rotation.

15. The yield of the reserved forests with the exception of Bowergarh and Khamapur, and also of some of the 2nd class reserves is given in Chapters II and III. There has not been time to reduce the quantities therein given to tons or cubic feet, and it is questionable whether there is any advantage to be derived from it. Such data as are given regarding the yield of fixed areas in the remarks in Chapter II on the Nimar Division, are vastly more important and useful.

16. The departmental timber operations have been referred to in detail in the remarks on each Division. 14,133 logs of timber, 65,333 poles, 117,523 bambus and about 300,000 cubic feet of stacked fuel, besides some grass and other minor produce were brought to depôt. 99,730 sleepers and a few scantlings and planks were cut. 40,947 sleepers were delivered and made over to the Chhattisgarh State Railway, besides which a large number were despatched to the line and intermediate depôts. To the Holkar State Railway were supplied 3,641 sleepers, and nearly two lacks of cubic feet of fuel.

17. The following is a comparative statement of the receipts and charges for the past and previous year :—

		1879-80.		1878-79.
Receipts	Rs.	10,06,723		8,52,862
Charges	A.—3,58,380		2,36,029	
	B.—1,64,193		1,57,686	
		5,22,573		3,93,715
Surplus	Rs.	4,84,150		4,59,147

These figures do not however show the real result of the year's transactions. The operations of the department expanded materially during the year, and heavy expenditure had to be incurred, the fruits of which could by no possibility be reaped within the year. If the difference in the value of stock which (*vide* Form 60) was Rs. 77,539 more at the close of the year be added and the difference in outstandings on account of revenue, which was Rs. 1,810 less, be deducted, we have Rs. 5,34,974 as the value of the year's transactions. As a rule, it is preferable to take only the income and charges into account, but this course in the present case would be altogether misleading.

18. In the revenue as above given is included a sum of Rs. 30,966-13-9 representing the adjustment of excess debits for which this department has been directed to take credit but which has no connection with the transaction of the year. Its deduction gives the true result of the year's transaction, viz. Rs. 5,34,008.

19. In Chapter II, relating to the 1st class reserves the charges against revenue from produce brought to depot on account of Government, those on account of receipts from produce removed by purchasers, and the charges on account of conservation and improvement, have been separately given for each forest.

20. The following statement gives these charges similarly arranged in totals for the 1st and 2nd class reserves :—

		Produce brought to depot on account of Government.			Produce removed by purchasers.			Conservation and improvement.			Total.		
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1st Class Reserves.	Receipts from ...	1,91,946	15	10	92,155	12	6	...	...	...	2,84,102	12	4
	Charges against..	2,04,324	12	9	29,339	12	10	77,846	11	8	3,11,511	5	3
	Surplus ...	...	...	...	62,815	15	8	...	...	...	...	...	...
	Deficit ...	12,377	12	11	...	...	...	77,846	11	8	27,408	8	11
2nd Class Reserves	Receipts from ..	8,647	1	11	6,81,444	2	4	...	...	...	6,90,091	4	3
	Charges against..	6,610	11	8	1,27,460	11	8	74,598	1	7	2,08,669	8	11
	Surplus ...	2,036	6	3	5,53,983	6	8	...	...	...	4,81,421	11	4
	Deficit ...	...	...	...	...	...	...	74,598	1	7	...	...	...
Total for 1st and 2nd Class Reserves.	Receipts from ...	2,00,594	1	9	7,73,599	14	10	..	...	...	9,74,194	0	7
	Charges against..	2,10,935	8	5	1,56,800	8	6	1,52,444	13	3	5,20,180	14	2
	Surplus ...	...	..	...	6,16,799	6	4	...	...	...	4,54,013	2	5
	Deficit ...	10,341	6	8	...	...	...	1,52,444	13	3	...	...	...

21. The apportionment of charges is, it must be admitted, not perfectly accurate, but it has been made with some pains and with due regard to existing conditions and the work done in each division and district, and the apportionment is on the whole a fair one.

22. Regarding the deficit resulting from the first head of expenditure in the 1st class reserves, it is only necessary to remark that the expenditure raised the value of stock at the close of the year to Rs. 77,537 in excess of what it was at the commencement of the year, that the charges are for the most part connected with the forests most remote from the market, and that some of the operations such as the supply of fuel and saj sleepers have been undertaken rather for the improvement of the forests than the production of a large present profit.

23. It will be observed that of the total expenditure Rs. 1,52,445 is debitable to the conservation and improvement of the forest, and Rs. 3,67,736 to the immediate production of a revenue amounting to Rs. 9,74,194. The slight difference between the figures above given and the actuals as shown by Form 49 is due to the omission of an adjustment of Rs. 30,966 under the head of revenue, and the receipts and expenditure on account of Telunkheri.

24. Form 51 has been prepared by the Comptroller General by whom Forms 49 and 50 have been verified; as however the Government of India in the review on the previous year's report suggested that Form 50 should be abridged, a separate statement in the same form is appended in which the details of the verified statement are given in a more concise form. The other prescribed forms are appended and require no explanation.

25. As required by the Government of India I now proceed to compare the actuals with the sanctioned estimates.

Receipts.

	Sanctioned.		Actuals.	
Receipts ...		Rs. 9,97,000		10,06,723
Charges.	A. 4,30,000		3,58,380	
	B. 1,82,000		1,64,193	
		6,12,000		5,22,573
Surplus ...		3,85,000		4,84,150

The revenue includes an adjustment of Rs. 30,000 which was not contemplated when the budget was prepared, and which has no connection with the year's transaction, and therefore the actuals are really Rs. 20,000 less than the estimate.

26. Under head IA., the receipts amounted to Rs. 1,07,679, and are Rs. 78,961 less than the estimate. This difference may be explained as follows. It was not found practicable to push on the delivery of sleepers from the Chanda division as rapidly as was expected, timber from the Mandla division was late in reaching Gwarighat, and the sales there were consequently less than was anticipated.

27. The excess in the actuals under head I.B, of Rs. 9,698, results from the supply of fuel to the Holkar State Railway which was not contemplated when the budget was prepared.

28. Under head I C, the actuals fall short of the sanctioned estimate by Rs. 4,277, which is due to it having been found necessary for various reasons to curtail the work of bringing bambus to depot.

29. Under head I.E, the actuals exceed the sanctioned estimate by Rs. 2,923. It is due to a larger amount of minor produce being collected on account of Government.

30. Of the excess receipts under other heads, as already explained Rs. 30,000 is due to the adjustment of a transaction connected with a previous year, but omitting this item the actuals are still in excess of the estimates by over Rs. 50,000, which is due to the steady tendency of the revenue from all sources to increase.

31. There are variations under sub-heads which it would be unprofitable to discuss in detail, but in may be said that the revenue from grazing has largely increased.

Charges

32. Under A. Ia., the expenditure has fallen short of the estimate by Rs. 74,210. The causes which have affected the receipts under the corresponding head have of course affected the expenditure under this head, though not precisely in the same proportion, for expenditure has been incurred which has increased the value of timber stock on hand at the close of the year.

33. The smaller amount of Rs. 11,024 spent under head A. I b, was due to the difficulty of obtaining carriage for the transport of fuel, while the saving of Rs. 2,299, under A. I c., is due to the smaller number of bambus brought to depot as explained under the corresponding head of revenue.

34. Under head A.II, the expenditure fell short of the estimate by Rs. 4,213. This is a small sum as compared with the large amount of Rs, 1,30,000, and calls for no remark except that the saving is satisfactory.

35. Under head A. V, there was no provision in the budget, but Rs. 1,118 were spent, the Comptroller General having decided to classify under this head certain refunds that were not previously anticipated.

36. The larger expenditure under head A.VIa. is due to the necessity of purchasing more stock than was at first intended; the same circumstance accounts for the excess expenditure under the next head A.VIb.

37. Under head A.VIc. the actuals exceed the estimates by Rs. 18,798. The extended sleeper operations in connection with the Chhattisgarh State Railway having necessitated the purchase of more machinery, tools and plant, and the charge is met by transfer from head A. Ia., under which a grant for the work was given.

38. Under head A. VIIb. there is a saving of Rs. 1,430, owing mainly to the cost of repairs to huts and rest-houses being less than was expected.

39. The saving under head A.VIIIa. of Rs. 3,600 is due to its being found impossible profitably to incur the proposed outlay.

40. Under head A.VIIId. there is a saving of Rs. 2,279 owing to a transfer of charges under this head to A.IXe.

41. The saving of Rs. 2,681 under head A.VIIIc. is partly due to savings in line clearing and partly to the discharge of establishment when certain areas were accidently burnt.

42. There was no provision under head A.IXa., but Rs. 2,835 was spent. The amount represents charges which can rarely be anticipated.

43. The differences under other sub-heads of A. are too small to require explanation.

44. Under major head B. there is a saving of Rs. 17,807 due, partly to the reduction in the staff of gazetted officers and partly to the extreme difficulty of obtaining the services of suitable men for the intermediate class of the permanent subordinate establishment.

CHAPTER II.

1ST CLASS RESERVES.

DIRECTION DIVISION.

Area and boundaries.

45. The area of the two small reserves of Kantera nala and Hathibari has undergone no change. Their boundaries and boundary marks have been carefully maintained.

Protection and improvement.

46. There were no breaches of Forest rules necessitating prosecution.

47. At the commencement of the fire season the ranger in executive charge was compelled by ill health to take leave. It took time to replace him, and ere his substitute arrived, nearly the whole of Kantera nala and part of Hathibari had been burnt. The following statement shows the outlay on fire protection :—

Range.	Area in acres.		Cost of area actually protected.						
	Under protection	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs	a.	p.	Pies.
Kantera nala	2,123	1,483	115	11	3	49	14	11	14·980
Hathibari	3,548	...	15	11	3	...	...	...	...
Total ...	5,671	1,483	131	6	6	...	...	...	...
Average for the Division ...						56	11	4	17·013

The area actually protected in Hathibari comprises the teak plantation and the most productive portion of the forest, and the high rate which is due to the smallness of the area is not so important as it otherwise would be

48. These forests are situated in the east of the Provinces where extended conservation and closer supervision are becoming more and more necessary, and it is therefore hoped that it will ere long be possible to post a Gazetted officer to Raipur and relieve the direction office of the charge of these two small reserves which are too distant for efficient control from the Conservator's head-quarters.

Yield and working.

49. The forests at present are only worked for lac and a little minor produce. The lac crop was not very successful, and the small quantity produced was left for reproduction.

50. The total yield during the year was 1 teak log, 150 poles, 2,300 bambus and 39500 pulas of grass.

Financial results.

51. The receipts were increased by sale of the previous year's stock of lac, which brought in Rs. 1,130. The total receipts amounted to Rs. 1,200, against an expenditure of Rs. 1,096.

52. Divided under main heads, the receipts and charges stand thus :—

	Revenue.			Expenditure.			Surplus.		
	Rs.	a.	p.	Rs.	a	p.	Rs.	a	p.
On account of Government produce brought to depot.	1,156	1	0	474	2	0	681	15	0
Produce removed by purchasers ...	43	7	8	12	14	4	30	9	4
Conservation and improvement ...	...	...	...	608	12	0	...	...	...
Total ..	1,199	8	8	1,095	12	4	103	12	4

MANDLA DIVISION.

Area and boundaries.

53. The area of the 1st class reserves has undergone no change since 1st April 1879.

Area.

54. The boundaries of the reserves under protection from fire were thoroughly cleared, while those of the remaining forests are reported as in good order. On the maintenance of boundary marks, the small outlay of Rs. 17-6-0 was incurred.

Boundaries.

Protection and improvement.

55. The number of offences detected was greater than in the previous year. There were 19 cases, in which 48 persons were involved; of these, 13 cases with which 30 persons were concerned were taken into Court and convictions obtained. The remaining 6 cases were comparatively trivial and compensation was accepted.

Forest offences.

56. No addition was made to the area under protection. The result of the year's work under this head is most unsatisfactory. Several fires occurred burning the Barela reserve, which had been protected for seven years, and no less than 37,120 out of 49,495 acres in the Banjar.

Protection of forest from fire.

The direct cause of these disasters cannot at present be recorded, and it is possible that they may never be discovered, but it is quite evident that there were defects in executing arrangements for protection, which will be looked into and corrected. The subordinate establishment was from unavoidable circumstances weaker than it should have been. In two cases small fires occurred through the neglect of subordinates for which punishment has been awarded.

57. The actual work done, and its cost up to the close of the dry season 1879-80, is as follows :—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a	p	Rs.	a	p	Pies.
Banjar valley	49,494	12,375	434	7	5	22	7	5	6·740
Motinala	1,659	1,659	49	10	0	19	2	3	5·743
Jagmundal	24,503	24,257	421	0	1	11	1	8	3·332
Chuharigogarh	1,661	1,653	75	1	2	29	1	0	8·720
Barela	7,153	...	74	15	10	...	..	..	...
Airi	2,150	2,150	10	12	0	3	3	2	0·960
Total ...	86,620	42,094	1,065	14	6	...	..	...	...
Average for the Division ..						16	3	3	4·862

Stocking of blanks.

58. The small plantation of tun was slightly extended, but without exception the plants have suffered from the excessive frost, which if it was not quite so severe was of longer duration than in the previous year. In the same manner the sevun and hurra raised in previous years have suffered. The divisional officer has been sorely discouraged by these results, but the work cannot be abandoned for the large blanks here add vastly to the severity of the frosts, which again prevent the spread of the natural forest. Some less sensitive species, such as sissu will now be planted with the view of introducing other species subsequently.

59. In the Barela reserve the block lying between the roads from Singora to Barungda and Gopalpur and the outer boundary was cleared of creepers at a cost of Rs. 81-4-0. In Jagmundal also this work was commenced, and an outlay of Rs. 36-14-0 incurred.

60. In the previous year's report the cost of the Khanaghat was given as Rs. 1,549, but the figures had not then all been booked. The actual cost was Rs. 1,678-11-9, the sanctioned estimate being Rs. 1,700. Owing to the friable nature of the soil there were a few land slips where the cutting was deep and the road itself was a little cut up by the rains of 1879. The debris from the land slips was removed and surface repairs executed.

61. Several rough stone causeways were also constructed between the ghat and Kisli, and there are now between Khana and the Juria nala near Kisli but few places where more than surface repairs will be necessary. The total outlay on these works was Rs. 749-13-3.

62. For the construction of a causeway across the Juria nala Rs. 340-4-9 was spent. The plans for this work have not yet been finally settled. It is hoped to make the causeway serve for the storage of water in the hot months as well as for a road, and it is possible that it may be made useful in other ways. There was also an outlay of Rs. 317-8-0 on temporary roads for the extraction of timber.

63. A sum of Rs. 213-11-5 was spent on the Bagcheragogarh in the Gangar immedietely below the Kisli and Indri crossing. Avoiding as far as practicable any interference with the general water level, a straight cut has been made through this rapid, and if hereafter improvement in the steadiness of the water-supply renders the transport of large timber by this stream practicable, the widening of the passage for this purpose will be comparatively easy. Though carefully undertaken and executed the works in the Banjar carried out in previous years, with the exception of cuttings through solid rock, were a source of some anxiety, but they have now stood very heavy floods and have proved in every way satisfactory.

River communication.

64. Estimate for opening out the Perwadhar on the Nerbudda between Mandla and Shazdara were prepared and sanctioned after consultation with the Chief Engineer. The estimated cost of this work is Rs. 1,610. Before the close of the official year it was not possible to do more than collect materials, and hence the outlay in 1879-80 was only Rs. 58-1-8.

65. By an accident in which the divisional officer also lost a private tent, the small forest hut at Kisli was burnt down. To replace the rest hut an expenditure of Rs. 100 has been sanctioned. A tree at a short distance from the hut being nipped by frost appears to have been the means of communicating fire, but it is nevertheless evident that the ground round the building was not cleared to a sufficient distance. A sum of Rs. 450 was also spent on the repairs of forest rest-houses and watchers' huts, &c.

Buildings.

Yield and working.

66. The supply of bambus, small wood and grass in the adjoining forests is as yet too plentiful to admit of the reserves being drawn on for such produce, and the sole source of revenue is therefore large timber, grazing and such minor products as form articles of trade, and the forests have been worked accordingly, though it cannot yet be said that they have been worked up to their capability.

67. The timber operations are still on a small scale, owing to the scarcity of skilled labour for conversion.

Timber operations.

The following statement shows the principal works of the year, their cost, and the rates at which they were carried out :—

	Pieces.	Cubic feet.	Cost.			Rate per cubic foot.
			Rs.	a.	p	Annas.
Manufacturing sleepers ...	8,851	18,734	3,990	3	4	3·407
Rafting sleepers from Mocha to Mandla ...	5,736	18,654	1,267	6	2	1·087
" sal logs from Mocha to Mandla ...	23	324	31	2	9	1·539
" sleepers from Mandla to Gowari ...	5,416	17,886	2,826	14	6	2·528
" sal logs from Mandla to Gwarighat ...	30	941	126	3	3	2·146
Carting sleepers from Banjar to Indri ...	4,330	6,484	1,792	15	10	4·424
" sleepers from Banjar to Mocha ...	4,660	12,916	3,363	12	2	4·166
" sleepers from Indri to Chichgaon on the Wainganga ...	3,760	5,664	3,255	9	4	9·196
Rafting sleepers from Chichgaon to Chhattisgarh Railway bridge ...	3,766	5,664	155	7	11	0·439
" teak logs from Chuharigogarh to Mandla	137	3,134	142	1	3	0 725
" teak logs from Mandla to Gwarighat ...	145	3,295	185	14	6	0·902

As small and larger sleepers were cut at one and the same time according to the suitability of the timber for each, the cost of manufacturing each class of

sleeper cannot be given exactly, but taking the rate per cubic foot at 3·04 annas the cost of a sleeper of 3½ cubic feet, would be about annas 10·8, and of a sleeper of 1⅝ cubic foot annas 4·9 ; but it has to be remembered that some of the sleepers were adzed and that, were they all sawn, the rates would be higher.

68. Except in the rafting charges, which have slightly decreased, the cost of transport was about the same as in the previous year ; with the fall in the price of grain which may now be expected they will probably decrease.

69. The experiments in taking small timber down the Gangar were continued, but were not very successful. The chief difficulty, viz. the obstruction in the Bagcheragogarh has now been removed, but much may still be done for the improvement of this stream for timber transport. The matter is one that will not be lost sight of.

70. Small quantities of hurra, honey and takur or wild arrowroot were collected on account of Government. The hurra crop was, as in the previous year, bad, and the out-turn very small.

71. The following statement gives the out-turn of the forests and the number of cattle grazed :—

Sal.		Teak.		Other kind.		Fuel.				Minor produce.			Grazing.		
Cubic feet.	Pieces and furdas.	Logs.	Bullees.	Bullees and Mulgas.	Pieces.	Maunds.	Pieces.	Boats.	Bambus.	Hurra, maunds.	Takur or wild arowroot, seers.	Honey, seers.	Buffaloes.	Cows and bullocks.	Goats.
18,803	148	6	946	12	98	44	345	16	31,162	225½	31½	27¼	476	4,594	12

Financial results.

72. The following statement shows the receipts and charges on account of each separate forest :—

Range.	Receipts.			Charges.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Banjar Valley	24,390	12	1	35,170	3	11	10,779	7	10
Topla	715	3	10	1,408	13	3	693	9	5
Keolikhapa	365	0	11	1,407	9	2	1,042	8	3
North Phen	521	2	6	1,402	12	7	881	10	1
South Phen	1,304	7	9	1,697	13	7	393	5	10
Motinala	105	15	9	1,474	8	7	1,368	8	10
Jagmandal	2,060	4	5	3,118	9	10	1,058	5	5
Chuharigogarh	867	6	7	1,784	2	7	916	12	0
Barala	236	5	5	1,829	13	5	1,593	8	0
Airi	44	4	5	1,346	3	7	1,301	15	2
Total ...	30,610	15	8	50,640	10	6	20,029	10	10

73. That these forests should still fail to yield a net revenue is much to be regretted, but as before explained the only produce that it pays to remove is, mature timber and such minor products as form articles of trade. As regards

timber none but old wood found lying in the forests has been extracted, and hurra, the principal minor forest product, was almost an entire failure.

74. Taking the present possible annual yield of the Banjar forest at 500 trees of 80 cubic feet each, (a very moderate estimate of its capabilities), the present cautious system of working has during the past season reserved in this forest alone 40,000 cubic feet of timber, which when worked out a few years hence, when the arrangements for conversion and transport are complete, must give a profit of Rs. 20,000. In working the Banjar forest therefore, capital has been reserved with a view to a larger profit. A similar remark would apply to most of the other forests, though at present it could not be so definite. The heaviest charges are against the Banjar forest, but of their amount nearly Rs. 12,000 represents expenditure that is not recurring.

75. In this division it is not an easy matter to apportion the B. charges accurately. Nevertheless I believe that in the following statement showing the expenditure under three main heads, they have been fairly distributed :—

Range.	Produce brought to Depot on account of Government.												Produce removed by purchasers.												Charges against organization, protection and supervision.		
	Revenue from.			Charges against.			Surplus.			Deficit.			Revenue from.			Charges against.			Surplus.			Deficit.					
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a	p	Rs.	a.	p.	Rs.	a.	p.
Banjar valley ...	24,290	7	7	27,047	4	1	...	.	...	2,756	12	6	100	4	6	44	13	8	55	6	10	...	...	..	8,078	2	2
Topla ...	262	4	11	65	9	1	196	11	10	...	.	...	452	14	11	115	4	5	337	10	6	...	...	...	1,227	15	9
Keolikapa ...	193	5	7	48	5	3	145	0	4	...	..	...	171	11	4	44	4	8	127	6	8	...	...	...	1,314	15	3
North Phen ...	421	13	4	105	7	2	316	6	2	...	...	..	99	5	2	26	14	0	72	7	2	...	...	...	1,270	7	5
South Phen ...	193	5	7	344	9	9	...	...	..	151	4	2	1,111	2	2	279	13	2	831	5	0	...	...	...	1,073	6	8
Motinala ...	102	14	7	57	14	6	45	0	1	...	...	..	3	1	2	2	12	10	0	4	4	...	...	...	1,413	13	3
Jagmundal ...	2,057	3	3	792	15	6	1,264	3	9	...	...	...	3	1	2	9	12	10	...	..	..	6	11	8	2,315	13	6
Chuharigogarh .	864	5	5	481	9	5	382	12	0	...	...	...	3	1	2	2	12	10	0	4	4	..	...	..	1,299	12	4
Barela ...	222	3	3	75	4	7	146	14	8	...	...	...	14	2	2	5	9	2	8	9	0	...	...	...	1,748	15	8
Airi ...	41	3	3	16	0	9	25	2	6	...	...	...	3	1	2	2	12	10	0	4	4	...	...	...	1,327	6	0
Total ...	28,649	2	9	29,03:	0	1	...	...	...	385	13	4	1,961	12	11	534	14	5	1,426	14	6	...	...	...	21,070	12	0

In the expenditure against the first head of revenue in the Banjar are included all extraordinary charges intended to facilitate timber transport, amounting in this case to over Rs. 6,000. The deficit shown in the other reserves from expenditure on account of revenue results from produce on which expenditure was incurred not being finally disposed of before the close of the year.

JUBBULPORE DIVISION.

Area and boundaries.

76. There is little to record regarding the two small first class reserves in this division. Their area is the same as in the previous year and their boundaries are all maintained in good order.

Protection and improvement.

77. There were no prosecutions for breach of forest rules, and it may be said that protection has been complete.

78. Both these reserves were successfully protected from fire, though no other important work of improvement has been possible. A small experiment in raising sissu was made by Mr. Calthrop, the result of which has not yet been reported.

The following statement shows the cost of fire protection up to the close of the dry season 1879-80 :—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre	
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Bijeragogarh	21,188	21,188	441	7	1	13	5	4	4·000
Singrampur	6,555	6,555	131	7	8	12	13	4	3·851
Total ...	27,743	27,743	572	14	9	...	...	...	...
Average for the Division ...						13	3	5	3·965

Yield and Working.

79. These forests are not at present worked. Only a few bambus, a little grass and a small quantity of minor produce has been taken from them.

Financial results.

80. The receipts and charges were as follows :—

Range.	Receipts.			Charges.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Bijeragogarh ..	173	8	6	1,770	2	1	1,596	9	7
Singrampur ..	413	8	11	1,114	4	1	700	11	2
Total ..	587	1	5	2,884	6	2	2,297	4	9

81. In the next statement the receipts and charges are classified under main heads :—

Range.	Produce brought to Depot on account of Government.												Produce removed by purchasers.									Charges against organisation, protection and supervision.		
	Revenue from.			Charges against.			Surplus.			Deficit.			Revenue from.			Charges against.			Surplus.					
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Bijeragogarh ...	6	5	3	8	0	9	...	...		1	11	6	167	3	3	41	9	7	125	9	8	1,720	7	9
Singrampur ..	199	11	5	91	4	10	108	6	7	...	.	.	213	13	6	53	7	4	160	6	2	969	7	11
Total	206	0	8	99	5	7	106	11	1	...	...	..	381	0	9	95	0	11	285	15	10	2,689	15	8

It will be observed that the outlay is almost entirely on account of conservation and improvement.

HOSHANGABAD DIVISION.

Area and boundaries.

82. The area of the 1st class reserves has been increased as follows :—

The Dhain block of 25 square miles included in Bori.
The Harrai block of 1,645 acres included in Rajaborari.
The Sarungpur block of 1,771 acres included in Saonligarh.

These areas had been previously declared reserved forests. The two last additions were made partly on account of their position with reference to the reserves to which they have been added ; but they both contain a large proportion of teak, are easy of access and conveniently situated with reference to the market. The Dhain block is a really valuable teak producing tract, a large proportion of which will in the course of time become excellent teak forest, while with the exception of a few narrow belts where the rock is near the surface the whole area is capable of being brought to a highly productive condition.

Boundaries.

83. The Harrai and Sarungpur blocks had been previously demarcated. The Dhain block formed part of the large tract known as the Malni ilaqua, from which it was separately demarcated during the past season. It has only 8 miles of artificial boundary, the

remainder being natural, while from the Bori reserve as hitherto constituted it is only separated by the Sonebadra. The artificial portion of boundary has been cleared to a width of 40 feet.

84. All boundaries have been maintained in good order. Exclusive of expenditure on clearing boundaries for fire protection, the following charges were incurred on the maintenance of boundaries, 40 miles in Rajaborari Rs 37, 29 miles in Saonligarh Rs. 24.

Protection and improvement.

Forest offences.

85. There were no prosecutions for forest offences. In 270 petty cases compensation for damage done was paid. These were all cases of moving produce or grazing cattle before obtaining a license. It is roughly estimated on the revenue that this was donein 2 per cent of the transaction with the department.

Protection from fire.

86. To the area under protection from fire were added in Rajaborari 4,480 acres, in Saonligarh 7,040 acres, and in Bori 15,800 acres.

Within the protected area several independent fires broke out but they were successfully suppressed, the total area burnt over being only 4,180 acres. One of these fires resulted from neglect of prescribed precautions by subordinates for which punishment has been awarded. One was traced to the negligence of a Goali grazing cattle; for various reasons sanction to compound this offence has been given. The origin of other fires has not been discovered.

87. The following statement shows the work done and its cost up to the end of the dry season 1879-80 :—

Forest.	Area in acres.		Cost of area actually protected.						
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre
			Rs.	a	p.	Rs.	a	p.	Pies.
Rajaborari ...	102,125	99,845	549	1	11	3	8	3	1·056
Saonligarh ...	70,251	68,551	316	7	2	2	15	3	0·886
Bori ...	39,480	39,280	1,010	2	4	16	7	3	4·937
Total ..	211,856	207,676	1,875	11	5	...	...	...	...
Average for the Division ...						5	12	5	1·734

It will be observed that the percentage of failure has been much smaller than in the previous year, while the area actually protected is greater by 31,419 acres. The charges per square mile have been a little higher than in the previous dry season, as greater precautions were considered necessary, and it is possible that a still further increase in Rajaborari and Saolingarh may be found expedient. In the last mentioned forest they are still decidedly low. The results indicate steady progress in this important class of forest work and are fairly satisfactory.

Grazing in forests protected from fire.

88. The Bori forest has continued closed against grazing, and as a matter of course no grazing has been allowed in any of the blocks in which sowings or the cutting over of teak has been in progress in the present or carried out in previous years. In the remainder of the area under protection from fire grazing has

been permitted conditionally. The only evil result that can be attributed to the concession in the past season is the small fire already mentioned as having occurred through the carelessness of a Gaoli.

Improvement cuttings.

89. The cutting over of badly grown teak was continued. The areas thus treated in the past year, the number of teak trees cut over and reserved, are given in the following statement:—

Range.	Block.	Locality.	Area in acres.	Teak trees cut over.	Teak trees reserved.	
					For seed only	As promising trees.
Rajaborari ...	Machuk ...	Burjhiri ...	410	5,880	430	3,696
	Ajnal ...	Jamunia ...	335	4,973	320	5,007
	Ganjal ...	Pania Mhow ...	515	9,842	1,200	8,444
Saonligarh ...	Dhekna ...	Nonia ...	500	3,766	500	5,385
		Total ...	1,760	24,461	2,450	22,532

The foregoing figures do not include seedlings and saplings under 6 feet in height.

90. The areas thus treated were also cleared of creepers, and on 320 acres in Burjhiri and 160 acres in Jamunia, where there is a moderate demand for fuel, the cutting out of inferior woods was also undertaken.

91. In the previous year's report it was noted that in the previous year's cuttings a number of teak shoots had thrown out secondary leaders. It had also been found that many teak shoots had been overtopped by the branches of other trees. Much was done during the past year to correct these defects. Secondary leaders on about 30,000 shoots were removed or checked, the re-growth of upwards of 1,000 strong creepers was removed, and a number of shoots and young trees were freed from overhanging branches calculated to prevent or check their development.

92. The shoots of previous years are on the whole in a flourishing condition and have generally developed independent roots.

The average height is now as follows :—

1874-75	...	22 ft. 0 in.
1875-76	...	22 ft. 4 in.
1876-77	...	16 ft. 11 in.
1877-78	...	14 ft. 1 in.
1878-79	...	8 ft. 9 in.

Forest Ranger Mahomed Ghouse records that in one of the cuttings of 1874-75 five shoots had seeded, but adds that they did not rise direct from the ground, but stood on the old stools and consequently had no independent roots.

Sowings.

93. A small experiment in raising sissu on the banks of the Sonebadra was not successful, owing to the omission of the subordinate in charge to weed at the proper time. The sowings of this species will be renewed as it will prove a valuable addition on the stretches of free soil along the banks of the river. In Rajaborari and Saolingarh teak was sown in prepared plots 6 feet apart, in lines 20 feet apart, saj, bija and

tinnus being sown in prepared plots between the lines of teak. The work done and its cost is as follows :—

Range.	Block.	Locality.	Area in acres.	Cost.		
				Rs.	a.	p.
Rajaborari ...	Machuk ...	Burjhiri ...	29	51	5	0
Do. ...	Ajnal ...	Barwani ...	21	25	6	0
Do. ...	Ganjal ...	Jawarda ...	28	27	4	0
Saonligarh ...	Dhekna ...	Dhekna ..	38	29	9	6
Do. ...	Tokra ..	Tokra ...	11	13	4	0
Bori ...	Joli ...	Joli ..	6	6	13	6
		Total ...	133	156	10	0

All the sowings have suffered severely from the excessive frosts of the past season, and it is not unlikely that with the exception of teak they may have failed in consequence, but nothing definite can be recorded on this point till after the current rains. The sowings of previous years were weeded at a cost of Rs. 72-9-6.

94. As regards the sowings of previous years, it must be admitted that they are not altogether a success. About 35 per cent of the plants have succeeded, though they are still small; but on the whole they promise to give a fair return for the small outlay incurred.

Communications.

95. The only work done under this head was rendering passable for carts, the roads between Singunpur and Burwani, Jawarda and Burwani, and Samurdha to Burkhera, the object being to connect the blocks in which cuttings were made with the main roads.

Yield and working.

96. The demand for those products which the forests are best able to supply, though doubtless increasing, is yet small, and consequently there has not been much progress in restricting the supply of the demand to limited areas in each year; still the importance of this course is steadily kept in view, and in the past year in the blocks worked for teak poles, fuel was also cut. In other respects, the arrangements for working have not been changed.

Timber operations.

97. The departmental timber operations were confined to the cutting and dressing of badly grown teak and fuel referred to under improvement cuttings. For the Chhattisgarh State Railway, 1,504 junglewood sleepers were cut and despatched to Nagpur. The latter undertaking was not profitable, owing to the heavy railway charges.

98. The following is a statement of the yield of the first class reserves of this division and the stock grazed in them :—

Timber and small building wood.									Grass.		Grazing.		
Teak poles and pieces.	Tinnus poles.	Poles of other kinds.	Hardu and khaim logs.	Logs of other kinds.	Junglewood sleepers 6 ft. by 4½ in. by 8 in.	Firewood, 2 bullock cart loads.	Bamboos.	Bamboo mats, head loads.	2 bullock cart loads.	Pulas.	Buffaloes.	Cows and bullocks.	Sheep and goats.
16,371	1,006	3,269	288	764	1,598	3,730	257,836	1,991	824	126,655	6,717	35,174	770

Financial results.

99. The following statement shows the results of the year's transactions :—

Range.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Rajaborari	15,049	8	0	7,537	9	5	7,511	14	7	...	...	..
Saonligarh	9,224	13	4	5,702	13	0	3,522	0	4	...	..	...
Bori	646	6	4	2,203	3	5	...	..	...	1,556	13	1
Total ...	24,920	11	8	15,443	9	10	11,034	14	11	1,556	13	1
				Net ...			9,477	5	9			

100. In the next statement the charges are divided under the main heads, and the result of expenditure against immediate revenue is shown :—

Range.	Produce brought to depot on account of Government.									Produce removed by purchasers.									Charges against organisation, protection and improvement.		
	Revenue from.			Charges against.			Surplus.			Revenue from.			Charges against.			Surplus.					
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Rajaborari .	4,631	6	0	2,725	8	4	1,938	13	8	10,415	2	0	1,785	6	9	8,629	11	3	3,026	10	4
Saonligarh ..	3,462	12	4	2,957	13	6	504	14	7	5,762	1	0	1,179	2	1	4,582	15	2	1,565	9	6
Bori ...	436	7	4	187	15	9	248	7	7	200	15	0	171	1	8	38	13	4	1,844	0	0
Total ...	8,533	9	8	5,871	5	7	2,712	3	10	16,387	2	0	3,135	10	6	13,251	7	9	6,436	5	10

It will be observed that after deducting all charges the surplus is only Rs. 9,527-5-9, but under existing conditions the outlay on organization and conservation cannot properly be debited against the transactions of the year, and if these charges are deducted the surplus is Rs. 15,964.

101. The area of the three ranges being 412 square miles the revenue per square mile was as follows :—

	Rs.	a.	p.
Gross revenues	60	9	8
Net deducting only charges against the year's receipts.	38	11	11
Net deducting all charges of the year ...	23	1	11

These are low averages, but the department has not yet begun to reap in revenue the fruits of conservation.

BETUL DIVISION.

Area and boundaries.

102. There has been a slight increase in the area of the 1st class reserves owing to the inclusion in Khamapur of 1,772 acres of 2nd class forest reserve known as the Gohar block.

Area.

103. The boundaries are reported as in good order. There has been no special expenditure on their maintenance.

Boundaries.

Protection and improvement.

104. There were 32 petty cases of breach of forest rules, but in 4 only was prosecution resorted to. The four persons charged were convicted.

Forest offences.

105. In the areas under protection there were two serious fires. The origin of that in Khamapur has been traced and the offender punished. The origin of the fire in Bowergarh has not been discovered. It occurred four days prior to my arrival in the forest in May last, when I had only the satisfaction of ascertaining that it might have been stopped and speedily extinguished had proper measures been adopted. The strength of the upper subordinate staff being reduced by the death of a Ranger who could not at once be replaced, and one Ranger having to take up the control of two divisions, suddenly deprived of the two gazetted officers previously in charge, there was no really competent subordinate available for this charge.

Protection from fire.

106. The actual work done and its cost for the dry season is shown in the following statement :—

Range.	Area in acres.		Cost of area actually protected.						
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a	p.	Pies.
Bowergarh	38,720	23,860	397	11	1	10	14	4	3·269
Khamapur	16,000	5,120	82	11	8	10	5	5	3·102
Total ...	54,720	28,480	486	6	9	...	...	...	.
Average for the Division ...						11	1	8	3 238

No other special works of improvement were attempted during the year. The plantations of previous years furnish more and more abundant evidence of the impossibility of growing pure teak forests unless it be under condition of soil and climate that are not here to be found. Where a mixed growth is springing up with the teak the growth is steadily improving.

Yield and working.

107. In the system of working no change has yet been found practicable, but it is expected that with the construction of the Bhopal State Railway a demand will spring up for such large timber as the Bowergarh forest is capable of supplying. The demand for tinnus poles in Khamapur appears to have increased, though the supply is at present drawn from a very limited area.

Financial results.

108. The receipts and charges were as follows :—

Range.	Receipts.			Charges.			Surplus.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Bowergarh	3,738	12	8	3,332	12	9	405	15	11
Khamapur	8,685	6	9	3,653	14	8	5,031	8	1
Total ...	12,424	3	5	6,986	11	5	5,437	8	0

109. In the following statement the figures are classified as suggested by the Inspector General of Forests in his review of Forest administration for the previous year.

Range.	Produce brought to Depot on account of Government.									Produce removed by purchasers.									Charge against organization, protection and supervision.		
	Revenue from.			Charges against.			Surplus.			Revenue from.			Charges against.			Surplus.					
	Rs.	a	p.	R	a.	p.	R.	a.	p.	Rs.	a.	p.	Rs.	a.	p	Rs.	a.	p.	Rs.	a.	p
Bowergarh ...	91	2	11	90	0	5	1	2	6	3,647	9	9	1,522	9	8	2,125	0	1	1,720	2	8
Khamapur ...	37	8	4	5	10	0	31	14	4	8,647	14	5	1,992	8	5	6,655	6	0	1,655	12	3
Total ...	128	11	3	95	10	5	33	0	10	12,295	8	2	3,515	2	1	8,780	6	1	3,375	14	11

The slight demand in the income in Bowergarh is not to be regretted, as it is due to certain plots of land hitherto under cultivation being abandoned. Had the subordinate staff been stronger it would probably have been compensated for in other ways. In Khamapur there was a small increase owing to the demand for tinnus poles.

NIMAR DIVISION.

Area and boundaries.

110. The area of the 1st class reserves was the same at the close as at the commencement of the year.

Area.

111. The boundary of the Khandwa reserve was improved. Those of the other reserves required no special expenditure.

Boundaries.

112. Several very accessible and promising blocks as 1st class reserves were partly demarcated, and since the close of the year the work of demarcation of Chaoria, Rainpura, Gunjari and Bhojwa blocks was completed.

Demarcation.

In this respect good work has been done and is still in progress. The necessity of largely increasing the area of the 1st class reserves has now been fully acknowledged. In a general way the blocks to be formed into first class reserves have already been determined, and it only remains to fix their limits. It may confidently be predicted that when the whole of these 1st class reserves have been demarcated the forest administration of this division will be greatly simplified.

Protection and improvement.

113. Only five cases involving 12 persons were taken into Court, and in every case conviction was obtained. In 166 petty cases compensation for the value of the produce was accepted.

Forest offences.

114. The area under protection was increased as follows :—

Protection from fire.

		Acres.
The Bainpura block	...	600
The Gunjari block	...	3,500
The Undria block	...	3,100
The Bhojwa block	...	1,820
The Ajnal block	...	15,000
Total	...	24,020

These areas during the year under report formed part of the 2nd class reserves, but they are sanctioned as 1st class reserves, and the protection was carried out in connection with that of other 1st class reserves, hence their protection is here adverted to.

115. Owing to the want of rain in Nimar the fire protection establishment had not been discharged up to the end of July, but to prevent further delay in writing this report the record of expenditure has been closed up to the end of June.

The following statement shows the work done and its cost up to the end of the dry season 1879-80:—

Range.	Area in acres.		Costs of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Kalibhit	62,080	62,000	278	10	0	2	14	0	0·863
Punassa	72,080	65,000	807	14	7	7	15	3	2·386
Chandgarh	61,440	48,885	391	15	4	5	2	0	1·539
Khandwa	35,840	35,068	795	2	2	14	8	1	4·353
Bainpura	600	600	42	0	0	44	12	9	13·440
Ganjari	3,500	3,500	111	0	0	20	4	0	6·075
Undria	3,100	3,100	23	4	3	4	12	10	1·441
Bhojwa and Beheria ...	2,000	1,820	22	0	0	7	11	9	2·321
Ajnal	15,000	15,000	57	13	9	2	7	9	0·740
Total ..	2,55,640	2,34,973	2,529	12	1	...	...	...	...
Average for the Division						6	14	2	2·067

116. There were several fires in Chandgarh and Punassa, but of these two only were of any importance. Regarding the one in Chandgarh, the divisional officer reports it is due to the inefficiency of the subordinate in charge who has now been transferred to a less responsible post. The precise origin of the fire in Punassa is not known, but its spread was due to the act of a subordinate, who it is believed finding himself to some extent at least responsible for the first occurrence, endeavoured to obliterate all traces of where the fire originated by spreading it. The case was first taken up and the warrant issued by the divisional officer in his judical capacity, but the offence was so serious that it was transferred to a higher Court. Unfortunately the divisional officer, owing to his having first enquired judicially into the case, in the first instance, had to depute a subordinate to prosecute. The Magistrate was induced from the evidence to believe that the tree at which the accused was caught lighting the fire was on one side of a road, whereas it stands on the other side, thereby making it appear possible that the fire lit by the accused was merely a counterfire to check the fire at the time in progress. The failure of the prosecution in this serious case is much to be regretted. Mr. Fernandez very carefully investigated the case, and is still convinced of the guilt of the accused, who it is almost needless to say is no longer a member of the Forest establishment. In spite of this failure it will be observed that the amount of work done is considerable and shows steady progress.

117. In one or two cases the rates are high owing to the smallness of the areas; but these little tracts are of exceptional value, and the heavier expenditure can therefore be afforded.

Improvement cuttings.

118. All departmental cuttings have been with the view to the improvement of the forests. These operations were confined during the year under report to the Block No. I. of the Punassa reserve, where cuttings have been carried on, in connection with the supply of fuel to the Holkar and Neemuch State Railways.

119. In continution of the operations of the previous year improvement cuttings extended over 180 acres between the 1st April and the setting in of the rains in 1879; and between the close of the rains of that year and 31st March 1880, they extended over a further area of about 300 acres. The 1st of these cuttings was on level ground, which but 18 years before had been under rough cultivation. The number of trees cut in and the marketable produce obtained

from this area is shown in the following statement, which also gives some insight into the composition of the forest.

Felled or cut back.		Outturn in marketable produce.		
Species.	No. of trees	Article.	No.	Cubic feet.
Teak ...	11,885	Teak—		
Rohan ...	2	Pieces of sizes ...		
Khair ...	482	Fellies ...		
Ber ...	9,617	Spokes ...		
Bijasal ...	1	Short upright small planks ...		
Babul ...	4,359			
Rinj ...	209	Khair—		
Dhaora ..	3,208	Hoe poles ...	5,451	2,500
Saj ...	131	Posts ...		
Kulum ...	79	Mhowa, Bihora Kulum, &c. logs ...		
Bihera ...	21			
Sahijla ...	22	Dhaora axles ...		
Mhowa ..	1			
Temru ..	23	Miscellaneous species— ..		
Anjun ...	88	Locomotive firewood ...	...	22,870
Other species ...	1,162			

In the foregoing statement of yield is not included branches too small for locomotive fuel or salai and mohun wood, which is at present unmarketable.

120. The quantity of material per acre standing on this area at the time of the cutting is as follows :—

		Timber.	Fuel.	Total.
Marketable produce cut	...	14	127	141
Left standing estimated by Mr. E. Fernandez, Assistant Conservator of Forests	...	20	200	220
Total	...	34	327	361

This is not a heavy crop, but it has to be remembered that a considerable amount of worthless material not included in the above figures was got rid of. The cost per acre of the operation has been Rs. 2-13-1.

121. Before recording the progress of the re-growth on this cutting it is necessary to give a brief description of the soil, locality, crop and the condition under which the latter originally existed, and I therefore give here the following extract on the subject from Mr. Fernandez's report.

"The area exploited is generally flat with a series of undulations traversing it from south to north. The soil is for the most part deep and rich, except on the undulating ground where it is almost pure silicious sand mixed with stones with reddish hard, but well fissured Vindhyan sandstone close to or at the surface. A belt of teak runs through it following the main water-course draining it. The teak is here abundant enough to form canopied growth by itself, but it is fortunately associated to a sufficient extent with ber, saj, kulum, tendu, dhaora, rinj, behera and khair. Elsewhere on the flat ground the growth consists almost entirely of "Acacia eburnea" abundant enough to form a dense thicket. On the central rising ground dhaora and khair predominate after salai. Bijasal is also well represented and mohin is numerous. All the flat ground was under cultivation only 18 years ago, and from that time to the closing of the block in 1873, it was subject to intense grazing and severe lopping for thorns for fencing like the rocky and stony portions."

122. The following statement gives the dimensions attained in this cutting of a few of the more important species :—

Species.	Average.		Maximum.	
	Height in feet.	Girth in inches at 2 ft. from ground.	Height in feet.	Girth in inches at 2 ft. from ground.
Teak	...	...	13	5·5
Saj	5·	...	7	4·5
Khair	3·5	1·75	7	3·
Ber	8·	4·	13	4·5
Dhaora	3·5	1·5	5	2·

Bija and kaim are also reported to have made good progress.

123. As is well known the frosts of the past two seasons have been excessive and the cutting above referred to has suffered severely. It is however a subject for congratulation that these frosts have occurred at the commencement of regular work in Punassa, as it will lead to caution, and serious disaster being guarded against in the more extensive working of the forests.

124. In connection with this cutting Mr. Fernandez has furnished the following list in which the species mentioned are arranged according to their susceptibility to frost while in a state of young coppice:—

1.	Salai ...	10.	Behera ...	19.	Rinj.
2.	Teak ...	11.	Dhaora ...	20.	Prosopis.
3.	Sewan ...	12.	Sirali ...	21.	Acacia ferrugenia.
4.	Ghatbore ...	13.	Astura ...	22.	Bol.
5.	Kaim ...	14.	Mohen ...	23.	Gurar.
6.	Bijasal ...	15.	Tendu ...	24.	Anjun.
7.	Lendya ..	16.	Thembria ...	25.	Bekal.
8.	Saj ...	17.	Palas ..	26.	Acacia catechu.
9.	Kahu ...	18.	Acacia eburnea..	27.	Ber.

125. The divisional officer's description of the area forming the second cutting herein referred to, and the crop standing thereon, is given in the following extract from his annual report:—

"Its southern portion containing about 110 acres, resembles in every respect the flat portion of the area exploited during the previous season (see paragraph). The remainder of it is hilly and extremely rugged with here and there a limited expanse of rich level soil in the valleys, where a little erratic cultivation was carried on 20 years ago. In these valleys teak is abundant with its usual allies, elsewhere salai is the predominate species and generally forming with mohen, dhaora, and anjun, a *quasi* full grown high forest containing lacunæ, which are filled up by khair, bijasal &c. This upper stage dominates over numerous seedlings of the more valuable species which only require an opening over-head to get away. In this latter class of forest our work is very difficult owing to the disproportionally great abundance of large salai and mohen trees, which practically yield no marketable produce."

126. The number of each species cut and the out-turn of the cuttings is given in the following statement :—

Felled or cut back.		Out-turn in marketable produce.		
Species.	No. of trees.	Article.	No.	Cubic feet.
Teak	1,986	Teak—		
Salai	1,043	Rafters ...		
Rohen	67	Posts ...		
Khair	2,503	Small beams ...		
Mohen	292	Medium sized beams ...		
Ber	6,724	Fellies ...		
Tinnus	12	Spokes ...		
Bijasal	745	Short uprights ...		
Gurar	6	Khair—	1,635	1,200
Babul	91	Hoe poles ...		
Rinj	1,424	Plough poles ...		
Acacia ferrugenia ...	2,068	Posts ...		
Dhaora	7,031	Kulum ...		
Saj	409	Beams ..		
Kulam	618	Dhaora— ...		
Behera	97	Axles ...		
Tendu	512	Tendu— ...		
Mokha	2	Cart poles ...		
Siwan	9	Miscellaneous species—		
Other species	9,493	Fuel ...	...	59,800

This gives an average out-turn per acre of 4 cubic feet of timber and 200 cubic feet of locomotive fuel.

127. The cost of the operations was Rs. 5-14-6 per acre or in all Rs. 1,672-12-3 of which Rs. 938-0-8 has been debited to improvement and the balance to the production of revenue. The expenditure in the first rotation is necessarily heavy both in proportion to the area and the out-turn, which is due to the large amount of material of no present value which has to be removed. The proportion however of such material should and will diminish with each rotation. It is moreover possible that a considerable portion of the material here classed as useless will a few years hence be a source of revenue though less valuable than the rest. The bulk of such produce is thoroughly adapted to the ordinary fuel requirements of the people, but in the present case though offered at nominal rates and finally for nothing, no one comes forward to remove it.

128. In the Khandwa reserve the work commenced in the previous year was continued till towards the end of the hot weather of 1879. 9,732 teak and 8,163 trees of other species were felled or cut back and gave an out-turn of 24,325 cubic feet of locomotive fuel, 1,004 teak rafters, 75 saj bullees and 882 teak spokes and fellies. The cost of the operation was Rs. 884-1-5, which includes the felling, cutting up and removal of numerous thick stunted salai, which gave no marketable out-turn and which were only encumbering the ground. The regrowth is reported as satisfactory, though on the low ground it has suffered from severe frosts.

Artificial stocking.

129. In the sowings of previous years the seed or plants failed in 25,690 pits, which were resown with teak during the rains of 1879, at a cost of Rs. 58-2-0. The seedlings in the successful portion of previous year sowings have made little or no upward growth, but their roots appear to have become somewhat stronger. The sowings in Block No. III. of Punassa reserve were extended by 149 acres. In this area teak and anjun were sown in alternate lines 15 feet apart, the pits in the lines being 6 feet apart for teak and 10 feet for anjun. The total cost of the sowing amounted to Rs. 456-14 8. The anjun germinated freely and would probably have succeeded well had it not been for the disastrous fire already referred to, which swept through the whole of the Punassa sowings. The extent of the injury done cannot be recorded till after the rains of 1880.

130. Near Kirgaon in the Khandwa reserve 500 acres were planted with bambu 15' × 15' and 106 acres 15' × 30". In the latter area teak was also planted 15' × 30" in lines alternating with the lines of bambu. The cost of the planting was as follows :—

	Total cost. Rs. a. p.	Cost per acre. Rs. a. p.
Teak and bambu	307 0 0	2 14 4
Bambu	155 0 0	3 1 9

The higher rate in the case of pure bambu planting is due to the longer distance the plants had to be transported. The young bambus were from the stock raised in 1878, and the teak was reared in nursery in 1879. The actual result of the planting has not yet been ascertained.

131. The following account by the divisional officer of the condition under which the planting was carried out leads me to fear that they will not be satisfactory :—

"The bambu seedlings used were obtained from seed sown late in the rains of 1878. They were thus barely one year old. Never having been transplanted into nursery lines from the seed-beds they had grown close together and were not, therefore, as large as they might have been. Indeed it was considered a disadvantage to use clumps that were too large, as it was believed that these, when put out, would take longer to establish themselves, and would on that account

require more careful tending. At any rate their transplant from nursery to plantation site would have been much more expensive. In this belief the seedlings in the nursery were kept back by being allowed to remain the whole time in the seed-bed, and by not being watered at all until the middle of April. The majority of the clumps consisted of three or four shoots from 12 in. to 20 in. high. In others although the ærial portion of the shoots was smaller, the rhizomes were of the same size. A few possessed strong shoots from 3' 6" to 4' high. These soon died down to the ground when at least two rainy days did not follow that of planting. The result obtained of course only showed that such clumps would have been all the better for having the strong shoots cut back just before planting."

"The rainy season consisted of long breaks of dry weather separated by a few days of fitful unsatisfactory showers except just towards its abrupt close in September, when copious rain fell. Nothing could have been more disadvantageous than this for our planting. The little rain between the long breaks of bright sunshine could be turned to very little account, and yet not being prophets of the weather, we could only hope that the rain would continue, and were thus obliged to push on the planting out as vigorously as possible only to find the transplants withering under a hot sun one or two days after. Again, although the heavy rain in September was excellent so far as it went, yet not having had a single shower in October, the seedlings had not the benefit of occasional after-showers to maintain the moisture of the soil and air while they were establishing themselves.

"These adverse conditions culminated in the severe frosts of the 3rd week of November. Nevertheless at the end of February the better established young clumps were still green and vigorous. The fruiting season of the ber being over, the bears in the neighbourhood fell upon the tender juicy bambu rhizomes and destroyed the best portions of the plantation. In some places where all the shoots had been green, as many as 80 out of 100 pits were found dug up when I visited the plantation."

Yield and working.

132. Beyond what has been indicated in the remarks on improvement cuttings, and the closing of Block No. VIII. of Punassa reserve against extra departmental cutting there has been no change in the system of working.

Timber operations.

133. The departmental timber operations were on a small scale and consisted merely in the cutting and supply to the Holkar State Railway of 3,642 sleepers and 186,000 cubic feet of stacked fuel. As noted under the head of improvement, a small quantity of teak poles and other wood was cut. The cost per 100 cubic feet of the supply of fuel above referred to was as follows:—

Cuttings	...	...	...	Rs.	0	12	0
Transport	...	...	...	„	3	12	3
Stacking	...	...	...	„	0	5	4
		Total	...	„	4	13	7

But this does not include the control and direction charges, a share of the charges for conservation and improvement, nor the cost of clearing the land of refuse, which is essential to the establishment of a fresh crop. The reduction of the cost of cutting is contingent on the improvement in the condition of the forests, which will also tend slightly to reduce the 2nd and 3rd items of charge, but the chief reduction must be in the cost of transport, for which arrangements are being made.

134. The following statement shows the yield of the forests of this division and the number of cattle grazed:—

	Teak.							Anjun.		Other wood for building and agricultural purposes.										Grazing.		
	Logs.	Poles.	Charputs, slabs and musalls.	Spokes.	Fellies.	Bullees.	Dry wood.	Posts and slabs.	Sleepers 6'×8"×5".	Logs and posts.	Poles.	Planks.	Poles, plough and Bakhur.	Ploughs and Bakhurs.	Fuel.	Bambus.	Grass.	Thorns.	Buffaloes and camels.	Cows and bullocks.	Sheep and goats.
Pieces	1,268	6,442	501	2,204	1,379	1	...	1,403	3,919	15	65	113	503	127	...	530,517	...	...	10,013	19,720	1,022
2 Bullock cart load	...	...	...	...	...	1½	242	...	...	10	205	...	340	2	2,778	...	1,294	78	...	...	...
4 Bullock cart load	...	...	...	...	...	...	...	...	...	3	...	...	...	...	20	...	53	...	...	...	...
Jothi load	...	...	...	...	...	...	10	...	...	...	56	...	1	...	...	...	...	...	...	..	...
Buffalo and bullock load ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	96	...	176	...	...	...	...
Cubic feet stacked	...	...	...	...	...	...	...	...	...	...	...	...	...	...	197,069	...	...	...	...	...	...
Head load	...	...	...	...	...	...	...	...	...	...	1,513	...	4	..	1	...	...	...	...	...	...
Maund	...	...	...	...	...	..	...	...	...	...	...	...	...	...	1,847½	...	1,107	2	...	...	...

Financial results.

135. The receipts and charges in the different reserves have been as follows :—

Range.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Kalibhit	8,172	8	10	3,096	6	8	5,07	2	2	...	...	...
Punassa	23,329	1	8	24,508	13	10	..	...	...	1,179	12	2
Chandgarh	4,227	11	6	2,406	5	4	1,821	6	2	..	...	...
Khandwa	3,200	1	6	8,053	6	5	...	...	...	4,853	4	11
Total ..	38,929	7	6	38,065	0	3	6,897	8	4	6,033	1	1
						Net ...	864	7	3			

136. In the following statement revenue and expenditure have been classified under main heads :—

Ranges.	Produce brought to depot on account of Government.												Produce removed by purchasers.									Charges against organization, protection and supervision.		
	Revenue from			Charges against.			Surplus.			Deficit.			Revenue from			Charges against.			Surplus.					
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p	Rs.	a.	p.	Rs.	a	p.	Rs.	a.	p.	Rs.	a.	p.
Kalibhit .	854	4	0	660	9	2	193	10	10	...	..	..	7,318	4	10	1,502	11	2	5,815	9	8	933	2	4
Punassa ..	19,657	3	9	16,766	13	10	2,890	5	11	...	..		3,671	13	11	3,392	8	3	279	5	8	4,349	7	9
Chandgarh ...	702	6	6	298	15	6	403	7	0	..			3,525	5	0	1,147	12	5	2,377	8	7	959	9	5
Khandwa ...	864	6	10	1,221	4	0	...	.	.	356	13	2	2,335	10	8	1,212	1	6	1,123	9	2	5,620	0	11
Total ...	22,078	5	1	18,947	10	6	3,130	10	7	...	..	..	16,851	2	5	7,255	1	4	9,596	1	1	11,862	4	

The heaviest expenditure has been against the supply of fuel to the Holkar State Railway, which is not yet a paying concern, though it is attended with advantage, and will in time bring in a fair return. It is to be observed that of the total outlay Rs. 26,202 are debitable against the year's revenue, the balance of Rs. 11,862 being debitable to improvements from which an immediate return is not expected. Leaving the latter item out of account the division shows a surplus of Rs. 12,727.

CHANDA DIVISION.

Area and boundaries.

137. The area of the 1st class reserves has undergone no change, though 114½ acres of land in the heart of Moharli reserve have been purchased with the view of including them in that reserve.

Area.

138. All boundaries are maintained in good order, no special expenditure on this account was necessary.

Boundaries.

Protection and improvement.

139. Forest offences have been few and there have been no prosecutions.

Forest offences.

140. The area under protection was not extended. The following is a statement of the work done and its cost up to the close of the dry season 1879-80.

Protection from fire.

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Bimarum	12,296	12,296	1,184	13	5	61	10	8	18·501
Mirkullu	8,479	8,469	909	4	7	68	11	4	20·614
Taroba	25,619	25,619	1,147	3	4	28	10	6	8·598
Goverdhun	13,931	13,681	619	4	7	28	15	6	8·691
Total ...	60,325	60,065	3,860	9	11	...	...	...	...
Average for the Division ...						41	2	1	12·340

As compared with some divisions the rates are high and in Ahiri they are excessive, owing as explained in previous reports to the length of boundary. The money is nevertheless well spent. Efforts are being made to effect a re-arrangement of boundaries which will render such work less costly.

141. Regarding the effect of fire protection in Moharli there is nothing really new to record. In Ahiri the young crop which covers a very large portion of the Bimarum forest is shooting up rapidly. In many of the more open parts the proportion of teak saplings ranging from 8 to 15 feet is large, while in some of these places teak saplings are so numerous that they must necessarily be thinned out at least within a few years.

142. In Ahiri no work of this kind was carried out. The system of planting teak at intervals in broad cleared belts in Moharli referred to in the previous year's report has succeeded fairly well. In some places the young trees are very promising, and I have no doubt that with a little higher cultivation very good results may be obtained. The other plantings made in single lines in the forests though not a total failure have not done well. The tendency of the natural growth to overtop the young plants accounts to some extent for the results not being better, but in the same lines the soil varies greatly, and in attempting to secure regularity many plants were placed in unfavourable soil. During the past year it was not found practicable to take any decided steps for teak propagation, and only a few seedlings raised from Nilambur seed were put out.

Increase of the production of teak by planting.

143. The felling of saj for sleepers is partly with a view to the improvement of the forest, and while selecting trees for sleepers, other trees which interfere with a young and more

Improvement cuttings.

valuable growth are also marked for felling. The number of trees thus selected and marked during the year in Bimarum is as follows :—

Division or block.	Sub-division or compartment.	Area in acres.	(Number of trees marked.			Average No. per acre.	
			Saj.	Other species.	Total.	Of saj.	Of all species.
IV.—	12	113	150	56	206	1·327	1·823
	13	119	211	46	257	1·773	2·159
	14	153	318	56	374	2·078	2·444
	15	136	305	46	351	2·242	2·580
	16	172	388	161	549	2·256	3·192
	17	136	168	90	258	1·235	1·897
Total ..	...	829	1,540	455	1,995	1·857	2·407

Of the 455 trees of other species marked gurari (Lebidicropsis orbicularis) is represented by 157, mohin by 83, kaim and palas each by 38.

144. In the previous year's report it was recorded that 5,828 trees had been marked exclusively for improvement, but after the cutting it was found that a very much larger number might be advantageously removed, and 37,600 trees, chiefly of the smaller varieties, were accordingly girdled, upwards of 70,000 creepers were at the same time removed and 533 injured teak saplings cut back.

Roads.

145. Another straight road was run through the Bimaram forest from pillar No. 21 to pillar No. 30. It has been well laid out, and excepting for a short distance near pillar No. 21 is nearly level.

Tramways.

146. During the rains of 1879 a short length of tramway was laid into Bimaram forest from the Allapilli depot to facilitate the transport of timber from the forest to the mills. It worked well during the rains of that year, but during the dry season the whole available stock of Government cattle had to be employed in collecting wood on the tramway for final transport to the mills during the rains of 1880. A report on the working of this tramway will be submitted next cold season. The construction of a tramway with wooden rails and sleepers from Allapilli to Kungara for the transport of sleepers was sanctioned, but it was not found possible to obtain labour for the earthworks and the scheme has had to be abandoned.

Yield and working.

147. The Ahiri forest is worked exclusively with the view to its improvement. In Moharli the only change in the arrangements previously existing is that the Taroba block was opened to purchasers for the cutting of bambus for a part of the year.

In Moharli the departmental timber operations were on an extremely small scale ; 21,421 bambus and a few poles and cart axles were cut and brought to depot.

Timber operations.

148. The timber operations in the Ahiri sub-division were as follows :—

Collection at the Allapilli depot of 12,783 sleeper lengths containing 111,670 cubic feet.

Collection on the tramway line in the Bimaram forest of 2,717 logs estimated to contain 44,000 cubic feet.

Manufactured at the mills of 56,407 sleepers and a few scantlings aggregating 88,221 cubic feet.

Delivery on the railway of 65,460 sleepers and a few scantlings.

Collection in the forest of between 40,000 and 50,000 cubic feet to come to depot during the rains.

149. During the year two 16HP. second hand engines were obtained and a vertical frame was taken over from the Public Works Department at Warora to facilitate the cutting of sleepers for the Chhattisgarh State Railway. It is fortunate that these additions to the stock of machinery were made, as not only was more power required for the cutting of saj timber, but the old engines though not absolutely unserviceable were found to be in want of considerable repairs. One of these has been put in thorough order and is now driving the circular saw. The others are being cleaned and repaired as time permits, and will be kept in hand to prevent stoppage of work in case of either of the other engines requiring to be put under repair. The new vertical frame was not started till January and consequently did not add largely to the season's out-turn, which must be kept in mind when referring to the following statement which illustrates the working of the machinery.

Timber cut up.		Feet cut.		Out-turn.			Current charges.		
Logs.	Cubic feet.	Running feet.	Superficial feet.	Kind and description of timber.	Number of pieces.	Cubic feet.	Rate per 100 cubic feet.	Total.	Remarks.
10,302	138,260	1,264,787	979,684	Teak sleepers 6 ft. × 8 ins. × 5 ins.	15,117	25,185	Rs. a. p. Per 100 c. ft. of rough timber. 6 8 1 Per 100 c. ft. of out-turn ... 10 2 0 Per 100 running ft. of sawing. 0 11 4¼ Per 100 superficial ft. of sawing ... 0 14 8¼	Rs. 8,993 15 11	
				Teak Basula sleepers 6 ft. × 8 ins. × 5 ins. ...	9,536	15,887			
				Saj sleepers 6 ft × 8 ins. × 5 ins. ...	26,337	43,877			
				Saj scantlings 6 ins. section ...	11,843	3,077			
				Teak scantlings over 50 ins. section ...	39	70			
				Teak plank ...	113	734			
				Total ...	62,085	88,830			

Detail of charges.

Particulars.	Amount.			Total.		
	Rs.	a.	p.	Rs.	a.	p
1.—Pay of Native Foreman	712	3	8			
2.—Establishment employed on machinery	4,518	0	11			
3.—Establishment employed on timber	653	12	8			
4.—Fuel	423	12	0			
5.—Watering	363	8	3			
6.—Oil, grease, stores &c., for working	991	6	3			
7.—Repair, including Workshop Establishment ...	456	12	5			
8.—Contingencies	...	...	...			
9.—Extraordinary charges	...	...	...			
A.—Total current charges	8,119	8	2			
B.—Add cost of establishment and maintenance during recess ...	...	...	...			
C.—Add 10 per cent Capital outlay on machinery ...	874	7	9			
Total charges ...	...	...	...	8,993	15	1

The actual working time and the number of days the machinery was at work is as follows :—

	Number of working days.	Working time. Hours.	Minutes.
No. 1 Vertical frame ...	313	17	34
No. 2 do. ...	71	17	45
Circular saw ...	313	17	18

150. The proportion of hard wood sawn was much larger than in the previous year, which accounts for the rates being somewhat higher.

151. The following statement gives the yield of the forests in the more important products and the number of cattle grazed :—

Range.	Timber and small building wood.					Wood for agricultural implements and carts, manufactured poles and pieces.	Bambus, large and small.	Bambu mats, baskets, &c.	Fuel.			Grass.		Grazing.		
									Wood.		Charcoal head-load.					
	Teak, cubic feet.	Saj, cubic feet.	Other kinds, cubic feet.	House posts.	Poles.				Cart-load.	Head load.		Cart-load.	Head-load.	Cows.	Buffaloes.	Sheep.
Ahiri	79,103	80, 6							...	.	.	.	..	...	.	...
Moharli ...			5,990	9,755	40,134	54,145	843,068	1,501,858	1,153	12	1,739	5,937	371	3,118	421	355

Financial results.

152. The receipts and charges have been as follows:—

Range.	Receipts.	Charges.	Surplus.	Deficit.
	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p.
Ahiri ...	1,17,030 4 0	1,46,747 10 11	.....	29,717 6 11
Moharli ...	21,724 6 9	10,384 2 5	11,340 4 4	.....
Total ...	1,38,754 10 9	1,57,131 13 4	11,340 4 4	29,717 6 11

153. In the next statement the expenditure against the two main heads of revenue and against conservation is shown separately:—

Range.	Produce brought to depot on account of Government.			Produce removed by purchasers.			Charges against organization, protection and supervision.
	Revenue from.	Charges against.	Deficit.	Revenue from.	Charges against.	Surplus	
	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p	Rs. a p.
Ahiri ...	1,16,457 10 10	1,38,851 12 6	22,394 1 8	572 9 2	44 12 9	527 12 5	7,851 1 8
Moharli .	1,144 5 7	1,774 5 6	629 15 11	20,580 1 2	3,433 11 1	17,146 6 1	5,176 1 10
Total ...	1,17,602 0 5	1,40,626 2 0	23,024 1 7	21,152 10 4	3,478 7 10	17,674 2 6	13,027 3 6

From the foregoing statement it will be observed that Rs. 13,027 were spent on conservation and improvement. A return from this outlay though certain is only looked for in the future, and therefore the charge is not strictly debitable against the year's transaction. Leaving this item out of account the charges amounted to Rs. 1,44,105 against a revenue of Rs. 1,38,755, thus showing a deficit of Rs. 5,450, which may be explained as follows:—

154. During the year the revenue works in hand were materially extended, more machinery had to be obtained to carry on the extended operations, and as a natural consequence there was a larger stock of material on hand and in transit at the close of the year.

155. The following statement exhibits with as much accuracy as possible the actual result of the year's transaction:—

	Rs.		Rs.
Total expenditure	1,57,132	Total receipts	1,38,755
		Increase in value of timber stock on hand ...	45,230
		Increase in value of other stores	26,760
Net result of the year's transaction	66,640	Amount spent on improvements debitable to future years	13,027
Total Rs.	2,23,772	Total Rs.	2,23,772

If the amount shown as debitable to future years be debited against the year, there still remains a profit of in round figures Rs. 53,000, of which Rs. 41,000 results from timber works.

SEONI DIVISION.

Area and boundaries.

156. Owing to the paucity of officers the West Pench range again forms part of the Seoni Division, but there has been no increase in the area of any of the reserves nor have any additional areas been taken up as 1st class reserves.

Area.

157. Except in the West Pench all boundaries were cleared to a width of 40 feet, partly in the ordinary course of arranging for fire protection, and partly by allowing outsiders to remove the produce standing on the boundaries in consideration of their clearing them. In the West Pench range in addition to the boundaries cleared for fire protection 12 miles were cleared by outsiders in the manner above referred to. The remainder of the boundary, though fairly clear up to date, will require attention and expenditure next season.

Boundaries.

Protection and improvement.

158. There were only 4 prosecutions for forest offences, in which 18 persons were involved: in two cases the conviction of 3 persons were secured. The number of persons acquitted is excessive, but they were all in connection with one case. In 50 petty cases the compensation was accepted for the damage done.

159. To the area under protection was added during the year the Sakata block, with an area of 10,020 acres referred to in paragraph 132 of the Forest report for 1878-79.

Protection from fire.

The following statement shows at a glance the work done and its cost during the dry season 1879-80:—

Forest.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. a p	Rs. a. p	Pie.
Korai	31,210	31,020	527 4 7	10 4 0	3·263
East Pench	42,580	31 38	445 8 [illegible]	9 1 4	2·725
Nagulwari	9,080	9,525	192 11 11	12 15 10	3·897
Paraspani	8,240	8,150	63 2 0	4 15 3	1·487
Sakata	10,020	10,020	125 8 0	8 0 2	2 404
Total	1,01,730	90,095	1,354 5 9	.....	...
Average for the Division ...				9 9 10	2·886

During the season there were seven fires in the areas under protection. Of these two appear to have been wilfully ignited, the others were accidental. One fire only spread over a considerable area, viz. that in the East Bench range, which burned 11,200 acres The offender in this case, a very elderly man, was detected, prosecuted and punished. Though he wilfully lighted the fire it was not with intent to burn the forest, and it was not without regret that I heard of the heavy punishment awarded him. The establishment may not be to blame for the occurrence of this fire, but it is not creditable that it should have been allowed to spread over so large an area. The case is still under enquiry.

Sowings.

160. Insufficiency of the supply of seed again interfered with the extension of sowings. A small quantity of Nilambur teak seed was sown in nurseries, but the seedlings were not ready to put out last rains.

The fotlowing statement shows the expenditure, the sowing of previous years, and the result attained up to date:

Block.	Year of sowing.	Area of each separate sowings of each year	Species sown.	Cost of each plot: In previous year.	Cost of each plot: In 1879 80	Total cost on 1st April 1880.	Remarks.
				Rs. a. p	Rs. a p	Rs. a p	
Korai.	1872	6 acres	Teak	125 1 9	. .	125 1 9	80 per cent alive, average height 7½ feet, 60 per cent healthy and 40 per cent suffered by frost.
	1874	19 acres.	Teak, sheesham and seevun ..	244 10 7	... ...	244 10 7	90 per cent alive, average height 4½ feet, all healthy.
	1875	18 acres.	Teak	122 14 3	10 15 6	133 13 9	About 90 per cent alive, no perceptable growth, all nipped by frost
	1876	50 acres	Teak	701 14 6	31 5 6	733 4 0	Same remarks as for 1875.
	1877.	75 acres	Teak, bija, saj, rohun sheesham and seevun	587 7 0	28 8 6	615 15 6	Do. do.
	1878.	3 acres.	Teak ..	9 0 0	... ...	9 0 0	A failure; will be resown this year.
Rukhur.	1877.	50 acres	Teak, sheesham, saj rohun, bija, and khair ..	161 14 3	... ...	161 14 3	About 50 per cent alive. Seedlings still beneath the grass.
Tulia ...	1877	12 acres	Teak and bija ..	40 14 1	... ...	40 14 1	About 60 per cent alive
			Total ...	1,993 12 5	70 13 6	2,064 9 11	

161. The work was confined to the Sukadongri and Mohgoan forest of the Korai range and extended over 2½ square miles. Within this area all badly grown trees of the better species were cut back to the ground and wherever practicable inferior species were cut over or girdled to give place to more valuable trees. All creepers were at the same time cut out. The cost of this cutting was Rs. 1,111-12-0, of which Rs. 500-7-6 has been debited against the marketable produce obtained and the balance of Rs. 611-4-6 to conservation and improvement A. VIII.*f*.

Improvement cuttings.

162. The total number of trees felled is 7,779, but the number of teak has not been separately returned. The out-turn of marketable material was 32 saj logs, 4,008 teak poles and pieces, 253 cart loads of rejected teak poles and 274 poles of other species.

163. The shoots from teak trees cut over in previous years have made good progress. In the Korai range those of 1877 average fifteen feet, those of 1878 thirteen, and those of 1879, six feet in height; while in the East Pench range shoots from the cutting of 1877 average thirteen feet. They are all healthy and vigorous, and from the result of examination made it may be said that they have all developed new and independent roots.

Yield and working.

164. Excepting in those portions of the Satpura reserve situated in Balaghat and in a few special cases in which special permits have been given to cut small quantities of greenwood in other parts of the forests, the removal by purchasers of bambus, deadwood and grass only has been allowed: and in the area under protection from fire working by purchasers has been restricted to such seasons as would not endanger the safety of the forests.

165. Regarding that portion of the reserve situated in the Balaghat district, I must first advert to the fact that in 1877 a report was submitted to the Chief Commissioner describing the people of Katangi and Karola as being in an extremely distressing state owing to the want of forest produce and their inability to purchase at the rates current in the Satpura reserve, and suggesting that the Sonawani forests should be thrown open to commutation. It was accordingly determined to open for cutting certain portions of the forest now referred to on a systematic plan and to fix for the people of Katangi and Karola special rates corresponding with the District Officer's ideas of what was right. A comparatively close inspection of that portion of the Sonawani range lying in the Balaghat district was accordingly undertaken, the forests were divided into working circles, and these again into compartments, and from the commencement of 1879-80 one block in each circle was opened for cutting, the rates to be paid for the produce being those approved of by the district officer.

166. The special licenses at lower rates have not been much sought after, and with the exception of fuel the bulk of the produce removed during 1879-80 has been taken at the ordinray rates previously in force. In the case of fuel there has been an increase in the demand of about 2,300 cart loads, and 16,500 head loads, but the rate for the cart-load of fuel, 2 annas, was not reduced, and I am of opinion that the larger demand is due solely to a larger quantity being available in one place. The total realizations under the special license at special rates were Rs. 609, and the special charges, exclusive of cost of licenses incurred on account thereof, Rs. 300. All circumstances point to the fact that no special arrangements were necessary, but as they have been made their abolition will not be hastily proposed.

167. The departmental timber operations were on a very small scale. To meet an urgent demand for sleepers 547 trees were carefully selected and felled in the rains in the West Pench and Kurai ranges, and on conversion yielded 6,177 metre gauge sleepers, which were delivered on the Chhattisgarh Railway,

Timber operations.

The following statement shows the number of trees of each species cut in each range and the out-turn in sleepers in each case:—

	Korai range.		East Pench range.	
	Trees.	Sleepers.	Trees.	Sleepers.
Bija	67	715	116	1,545
Saj	205	2,370	94	903
Mohwa	11	162	19	40
Kahu	26	350	6	78
Rohun	...	...	3	14

The sleepers were however much oversize, having been cut under difficulties and during an unhealthy season when skilled labour was difficult to procure and strict supervision over the sawyers could not easily be exercised.

168. The total quantity of produce brought to depot on account of Government was as follows:—

	No.
Sleepers	6,177
Teak poles	4,168
Teak pieces	187
Cart-loads of teak rejections ...	278
Saj logs	35
Junglewood poles	314
Bhirra wood	50
Cart-loads of fuel	52
Bambus	36,350
Cart-loads of fencing bambu ...	86
Grass, poolas	60,000

The total yield of the forests is given in the following statement:—

	No.
Poles	3,411
Cart-loads of timber ...	566
Head-loads of timber ...	1,358
Cart-loads of fuel	5,895
Head loads of fuel... ...	23,002
Bambus	5,92,202
Cart-loads of bambu ...	392
Head-loads of bambu ...	1,141
Grass, cart-loads	5,497
Do. head-loads	490
Do. poolas	2,67,717

The number of cattle grazed in the reserve was as follows:—

Cows and bullocks... ...	29,385
Buffaloes	4,454
Goats	5,699

Besides the above 37,209 head of cattle of all kinds were grazed for short periods.

Financial results.

169. The receipts and charges were as follows:—

Range.	Receipts.	Charges.	Surplus.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Korai	10,053 14 8	8,563 7 6	1,490 7 2
East Pench	9,998 14 9	5,977 3 11	4,021 10 10
West Pench	5,866 2 9	2,754 3 4	3,111 15 5
Sonawani	3,610 6 6	3,016 11 11	593 10 7
Total ...	29,529 6 8	20,311 10 8	9,217 12 0

Thus the surplus amounted to Rs. 9,218 against Rs. 1,328 in the previous year. Of the increase in the surplus about Rs. 4,900 is due to the special cutting of 547 trees for conversion into sleepers, the balance is accounted for by the difference in establishment charges owing to the temporary reduction in the staff of gazetted officers.

A few sleepers still remain to be taken over, adjustment of the value of which would have increased the value of the year's transaction by about Rs. 800.

170. The following statement gives the expenditure divided under the three main heads and the receipts on account of which the revenue charges were incurred :—

Range.	Produce brought to Depot on account of Government.			Produce removed by purchasers			Charges against organization, protection and improvement.
	Revenue from.	Charges against.	Surplus.	Revenue from.	Charges against.	Surplus.	
	Rs. a. p	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a p
Korai	7,281 3 0	3,789 11 8	3,491 7 4	2,772 11 8	1,327 7 9	1,443 3 11	3,443 14 2
East Bench .	5,493 1 8	2,695 12 8	2,797 5 0	4,505 13 1	1,649 9 5	2,856 3 8	1,631 13 10
West Bench ..	.	... .	. .	5,866 2 9	1,415 0 6	4,451 2 3	1,349 8 9
Sonawani ...	. ..	..	...	3,610 6 6	1,852 14 2	1,757 8 4	1,163 13 9
Total ..	12,774 4 8	6,485 8 4	6,288 12 4	16,755 2 0	6,246 15 10	10,508 2 2	7,579 2 6

In the forgoing statement the A. charges have been divided according to the purposes for which they were incurred, and the control charges having been apportioned with as much accuracy as possible to each range, the total B. charges against each range have been distributed under the three main heads of expenditure, one-half being debited to organization, &c., and the balance divided between the two heads of charge against revenue.

171. No comparison can in this case be instituted between charges against revenue from produce removed by purchasers and those against revenue from produce brought to depot on account of Government, because the separate sets of figures refer to different classes of produce. Deducting the charges against organization and conservation and improvement, which are certainly not overstated and from which an immediate return cannot be expected, it will be seen that this division gave a surplus of Rs. 16,797, or if thought proper to deduct the value of sleepers which was the result of an exceptional cutting, Rs. 11,897. Considering the restrictions on cutting in the present which conservation necessitates, the steady improvement in the condition of the forests and increase in the value of standing stock that is growing on, these results are satisfactory.

172. The receipts per square mile stand thus—

	Rs. a. p.
Gross receipts	63 1 7
Net, deducting only charges against the year's revenue ...	35 14 3
Net, deducting all charges incurred in the year ...	19 11 2

SAUGOR DIVISION.

Area and boundaries.

173. During the year under report there has been no change in the area of the reserves. It may here be noted that the 12 years, lease of 200 acres in Garhakota rented by Chattersingh of Ghogra expired during the year under report. In this area no right in land extending over one year will again be granted.

Area.

174. With the exception of the Tigora boundary which requires re-clearing the boundaries of the reserves are all in good order.

Boundaries.

Protection and improvement.

175. There were 12 prosecutions for forest offences in which 17 persons were involved, and in every case conviction was obtained. In 367 petty cases compensation for damage done was accepted.

Forest offences.

176. The following is a statement of the work done under this head and its cost during the dry season of 1879-80:—

Protection from fire.

Range.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre
			Rs. a. p.	Rs. a. p	Pies.
Garhakota	2,899	2,899	20 6 0	4 7 10	1·348
Hathkho	10,598	10,598	410 8 4	24 12 7	7·437
Ranjir	1,987	1,987	7 3 6	2 5 2	0 698
Ranipura	2,720	2,720	51 15 0	12 13 6	3 666
Total ...	18,204	18,204	490 0 10	... ...	.....
Average for the Division ...				17 3 8	5·169

The difference in rates is mainly due to local conditions which vary in different forests, but it also appears that charges for line clearing round those portions of the forest have incorrectly been included in the foregoing charges and cannot be separated without causing delay. In the foregoing statement are included only those areas on which special expenditure has been incurred, but I learn from the divisional officer that of the remaining areas of the 1st class reserves nearly the whole have been protected from fire during the dry season 1879-80.

177. The principal other work of improvement has been the propagation of bambu. During the past year 3½ acres of nursery in Garhakota, 2 acres in Ranipura and 4 acres in Hathkho were sown with seed of the "Dendrocalamus strictus" and now contain a goodly stock of young plants.

Sowing and planting

In Garhakota within an area of 95 acres 6,700 bambu plants were planted out 15′ × 15′, the planting being confined to suitable soils and localities. Similarly 3,315 plants were put out in Hathakho. The stock planted was from nurseries of the previous year, and in both cases the transplants are thriving. In Ranipura 3,500 plants of sissu were also put out and are doing well.

178. Small as these operations appear on paper the work done is of a high value, and to make this the more clear I would note that the planting of bambu accomplished in Garhakota alone if as successful as it promises to be, represent an addition of at least Rs. 400 per annum to the income commencing 6 years hence. The nurseries will furnish a large stock for future plantings.

Yield and working.

179. The forests have continued open to the public for the removal of dead wood, grass and minor produce; while grazing has been allowed in those areas not specially protected from fire.

Timber operations.

180. The departmental timber operations have been confined to the cutting out of about 10,000 saj poles in Ranipura and a few teak poles in Garhakota and Hathkho, all of which are said to have been killed by the previous exceedingly dry and hot season, but which more probably had first suffered from the severe frosts.

181. The following statement gives the out-turn of the forests and the number of cattle grazed:—

Teak poles.	Saj poles.	Poles of other kinds.	Plough shares and cart axles.	Building wood.			Fuel.						Bambus.	Grass.				Grazing.				
							Wood.				Charcoal.											
				Cart load.	Buffalo load.	Head load.	Cart load.	Buffalo, pony and donkey load.	Head load.	Basket load.	Cart load.	Head load.		Cart load.	Buffalo load.	Head load.	Pulas.	Buffaloes.	Cows and bullocks.	Sheep.	Ponies and donkeys.	Thorns, cart load.
3,197	3,559	2,056	113	1	2	13	1,022	2,112	1,484	1,125	13	968	916	1,636	34	12,316	11,339	2,714	10,237	56	2,494	152

Financial results.

182. The result of the year's transaction is given in the following statement:—

Range.	Receipts.	Expenditure.	Surplus.	Deficit.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Garhakota ...	1,772 15 7	2,548 7 9	... ...	775 8 2
Tigora ...	300 7 3	144 5 1	156 2 2	... ...
Hathkho ...	2,573 7 5	2,686 10 4	... ...	113 2 11
Ranjir ...	1,720 9 11	806 14 1	913 11 10	... ...
Ranipura ...	735 3 9	1,417 10 1	... ...	682 6 4
Total ...	7,102 11 11	7,603 15 4	1,069 14 0	1,571 1 5
			Deduct Surplus ...	1,069 14 0
			Net Deficit ...	501 3 5

183. The following statement shows separately the revenue and expenditure under main heads:—

Range.	Produce brought to depot on account of Government.				Produce removed by purchasers.			Charges against organization, protection and improvement.
	Revenue from.	Charges against.	Surplus.	Deficit.	Revenue from.	Charges against.	Surplus.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p
Garhakota ...	78 10 5	21 5 0	57 5 5	...	1,694 5 2	447 11 4	1,246 9 10	2,079 7 5
Tigora ...	.....	.....	.....	...	300 7 3	113 11 7	186 8 8	30 6 6
Hathkho ...	245 13 5	116 4 7	129 8 10	...	2,327 10 0	793 10 5	1,533 15 7	1,776 11 4
Ranjir ...	480 13 6	253 2 8	227 10 10	.	1,239 12 5	374 10 7	865 1 10	179 0 10
Ranipura ...	13 7 0	125 7 0	.....	112	721 12 9	376 11 5	345 1 4	915 7 8
Total ...	818 12 4	516 3 3	302 9 1	...	6,283 15 7	2,106 10 4	4,177 5 3	4,981 1 9

The deficit under the first revenue head in Ranipura results from the produce on which the expenditure was incurred not being disposed of before the close of the year.

184. It is evident that a return in revenue is not and cannot yet be reaped from the outlay on conservation in this division. To show therefore the result of the year's transaction the expenditure on this account should be deducted, thus leaving a surplus of Rs. 4,590-14-4.

The result per square mile is as follows:—

	Rs.	a.	p.
Goss revenue	109	5	0
Net, deducting charges against revenue only ...	68	15	0
Net difference between revenue and all expenditure—deficit.	7	12	0

Considering that, with the exception of the small areas of Garhakota and Tigora, these reserves were only formed in 1872 in consequence of the devastation that had taken place, better results could scarcely yet be hoped for.

CHAPTER III.

2ND CLASS RESERVES.

NAGPUR DIVISION.

Area.

185. The area of the reserve is the same as in the previous year.

Boundaries.

186. Between most of the private and Government forests, lines from 5 to 10 feet wide have been cleared by the Malguzars of the adjoining estates, but there are still said to be some places where the boundaries are not defined as they should be.

Prosecutions.

187. In seven cases 27 persons were prosecuted and convicted for forest offences, two of which were sufficiently serious to be dealt with under the Penal Code. Besides the above, there were fifteen cases of grazing and removing of produce without license, in which the offenders were allowed to pay compensation.

Yield and working.

188. There has been no change in the arrangements for working.

The following statement exhibits the yield of the forest during the past year:—

	Number.	Cart loads.	Head loads.
Teak poles	100	...	...
Saj poles	5,000	...	...
Other building timber	...	400	575
Firewood	...	11,657	24,723
Grass	...	720	3,983
Bambus	...	110	4,084

The following statement shows the number of cattle grazed:—

	On annual license.	On license for short periods.	Total.
Buffaloes	6,660	13,915	20,575
Cows and bullocks	79,301	22,422	1,12,903
Sheep and goats	24,058	16,769	40,827

189. The revenue and expenditure was as follows:—

Receipts	...	Rs. 30,611
Charges	...	„ 14,105
Surplus	...	Rs. 16,506

Of the expenditure about two-thirds or Rs. 9,400 is debitable to revenue from produce removed by purchasers, and the balance or Rs. 4,705 may be fairly taken against forest conservation.

190. As suggested by the Forest officer and the Deputy Commissioner, the time has arrived for doing something for the more systematic management of these forests. The matter will be taken up as soon as practicable. Whatever is done must be on a small scale to begin with, as there can be no improvement without throwing into the market a comparatively large quantity of produce which would otherwise continue to encumber the ground.

BHANDARA DIVISION.

191. The area of the reserves has undergone no change since the submission of the previous year's report.

Area.

192. For administrative purposes the forests are grouped in circles as follows:—

	Acres.
The Tirora circle	82,230
„ Pertabgarh circle	82,146
„ Chandpur „	95,469
„ Sahangarhi „	63,819
„ Pauni „	27,110

The Tirora circle and portion of the Partabgarh circle aggregating 36,172 acres have been closed against cutting, though they are kept open for grazing and the removal of dead wood and minor produce.

193. For forest offences 89 persons were prosecuted in 41 cases, and the conviction of 83 persons in 38 cases was obtained.

Prosecutions.

194. Commutation has been abolished, excepting for the inhabitants of those khalsa villages in, or bordering on the open forests of not more than 100 houses each. All others are now required to take out licenses for specific quantities.

195. The system of forming the right to collect grazing dues has been abandoned in favour of collecting them on account of Government.

196. In return for the concession in favour of certain villages in maintaining commutation, the inhabitants of these villages are required to assist in the protection of the forests in the immediate vicinity of their villages, and to assist in the recovery of passes under cover of which produce has been removed.

197. It was at first thought that the changes herein referred to would result in a very material decrease in the receipts, but the total income was only Rs. 7,668 less than in the previous year. Under existing arrangements the receipts are more evenly distributed over the different months of the year, and when it is remembered that the new arrangements only came into force in November, and that up to the end of October the realizations had only amounted to Rs. 12,000, the remaining Rs. 29,000 having been realized in the last five months of the year, it seems probable that the change will result in a larger instead of a smaller income.

Receipts and charges.

198. The actual receipts and charges were as follows :—

Receipts	...	Rs. 41,078
Charges	...	,, 3,644
Surplus	...	Rs. 37,434

199. Slowly as the change has come about, it is a certain fact that with the exception of a few areas of no great extent, the Bhandara forests have been reduced to a very bad condition. Their condition is, however, far from hopeless. Though it must take a very lengthened period to restore them to a thoroughly productive condition, steady improvements could be secured without difficulty, and at a moderate cost, if the means were only available. To secure improvement the greater portion of the existing crop must be cut over, but a proportion of trees of the best kinds standing on the ground and best adapted to each individual locality must be reserved. This latter is the work requires skill and judgment. At present the subordinate establishment is far too weak to admit of much, if any thing, being done.

WARDHA DIVISION.

Area and boundaries.

200. The area of the reserves is the same as at the close of the previous year.

Preparatory to their being formed into first class reserves, the demarcation of the Erjarh forest was completed, and that of the Dhuga forest taken in hand. The separate demarcation of the latter forest was not however completed before the close of the year. The boundary marks consist on soft ground of heaps of earth, on stony ground of heaps of stones thrown up so as to show the direction of the boundary. This course has been adopted with the intent of

ultimately making the ridge of stone or earth continuous except at the crossings of nalas. Along the line of marks, a belt 40 feet wide has been cleared of all forest growth.

Protection and improvement.

201. There were 46 cases in which 109 persons were prosecuted for breach of forest rules, and in 35 cases 73 persons were convicted and punished. The proportion of persons acquitted is large.

202. During the past dry season the district forest officer has been fairly successful in keeping fires out of the Erjarh and Dhuga reserves, though, beyond a few rupees spent on line burning, there has been no special expenditure on the undertaking, and the blocks are not included in the return of areas under systematic protection.

203. In the rains of 1879 about 50 acres in the Erjarh and Dhuga reserves were sown with bambu, the seed being placed in prepared lines 15 feet apart. Several small bambu nurseries were also formed. The sowings in lines were too thick and in the nurseries far too much seed was used.

In the lines and one or two of the nurseries rats did much mischief, in one case devouring nearly the whole of the succulent young rhizomes. The young plants, though ten times the size of natural seedlings of the same age, for the most part died down to the ground during the hot season as do the young natural seedlings, but there is every reason to believe that though a percentage may die outright a large proportion will throw up stronger shoots this rains.

Yield and working.

204. Under judicious management the Erjarh and Dhuga reserves may be worked with advantage. Conditions particularly as regards the market are favorable and especially so in Erjarh. Nothing was however done in these forests during the past year as there was a large quantity of wood cut on the lines. From the remaining area of the forest the cutting and removal of wood other than that of certain reserved kinds is permitted under cover of a license.

205. Nearly 9,000 ber kunnas, 441,000 pulas of grass and some firewood, charcoal and honey was collected and brought to depot partly at Arvi and partly at Wardha. These operations are on the whole not very remunerative at present, but they may be expected to expand, and under any circumstances they must tend to keep down the prices of produce in the market and to increase its value in the forest.

Financial results.

206. Owing to the abundant crop of artificially raised fodder the grass "birs" did not sell as well as in the previous year, nevertheless a fair income has been obtained.

The receipts and charges stand as follows :—

Receipts	...	...	Rs. 29,134
Charges	...	...	„ 12,935
		Surplus	„ 16,199

Portion of the charges are debitable to conservation and improvement as indicated in the next statement.

Division.	Produce brought to depot on account of Government.			Produce removed by purchasers.			Charges against organization, protection and supervision.
	Charges from.	Charges against.	Surplus.	Revenue from.	Charges against.	Surplus.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Wardha ...	4,474 3 5	2,966 3 2	1,508 0 3	24,659 11 11	5,857 1 11	18,802 10 0	4,111 4 3

It was difficult to decide accurately how much of the establishment charges could properly be charged to conservation and improvement, but considering the conditions under which the forests have been worked it has been considered fair to debit ⅓ of these charges to this head, the balance being apportioned to the charges against the two heads of revenue.

BALAGHAT DIVISION.

Area.

207. The area of the reserves is the same as in the previous year.

Boundaries.

208. The Deputy Commissioner reports that some good work has been done in the clearing of boundary lines between the Government and private forests.

Forest offences.

209. In eighteen cases 60 persons were prosecuted for forest offences, and the conviction in sixteen cases of 55 persons secured. The Deputy Commissioner is of opinion that the offences that should have been detected and prosecuted are considerably in excess of the actual prosecutions.

Improvement.

210. From the District Officer's report I am led to believe that the areas referred to in paragraph 182 of the past year's report remained closed except for the removal of grass, dead wood and bambus.

211. The Pandratola reserve was successfully protected from fire. Natural reproduction has made fair progress in this little forest, and the general growth has certainly improved. The Katung bambus will soon furnish marketable stems.

Receipts and charges.

212. The receipts and charges have been as follows:—

Receipts	...	Rs. 26,956
Charges	...	„ 5,721
Surplus	...	Rs. 21,235

The Deputy Commissioner confidently predicts that with the stronger establishment now sanctioned an increase of revenue will be obtained.

CHANDA DIVISION.

Area.

213. The area of the 2nd class reserves is the same as in the previou year.

Forest offences.

214. There were 30 cases, in which 55 persons were prosecuted for breach of forest rules. The conviction of 46 persons in 21 cases was obtained.

Receipts and charges.

215. The receipts amounted to Rs. 69,106, and the charges to Rs. 17,944, leaving a surplus of Rs. 51,162. The total receipts were only Rs. 1,082 less than in the previous year, which is satisfactory, considering the great fall in the value of mhowa which in the previous year brought in Rs. 11,700.

JUBBULPORE DIVISION.

Area.

216. The area of the 2nd class reserves has undergone no change. The transfer to the 1st class reserves of the lower Gower forests was sanctioned, but their separate management will not commence till the close of the current year, before which time the preliminary arrangements will be made. As already reported this block with an area of 5,517 acres situated on the banks of the Gower river, and within 12 miles of Jubbulpore, is extremely valuable and must in time give a very large revenue.

Forest offences.

217. The district return shows that there were 176 prosecutions, but it is evident from the Deputy Commissioner's report that a number of cases in which compensation was accepted and there were no prosecutions, are included in the figure above given. Seeing that the prescribed form is so plain and simple, it is difficult to understand how it could be misunderstood. The actual number of prosecutions has not been intimated to this office, and the error escaped notice till too late for correction.

Improvement.

218. The blocks specified in paragraph 193 of the report for 1878-79 continued closed against cutting.

219. The Deputy Commissioner's report shows that under the Chief Commissioner's order hurra and achar have been included in the list of specially reserved trees.

220. Some modification has been made in the license system to meet the wants of people having small requirements, by having licenses for single head loads, a provision which appears not to have been made when the fixed value licenses were first introduced.

Receipts and charges.

221. The receipts and charges were as follows :—

Receipts	...	Rs.	19,769
Charges	...	,,	7,374
Surplus	...	Rs.	12,395

The revenue appears small for so populous a district, but it has to be remembered that a very large proportion of the total forest area in this district is in the hands of private individuals or communities.

SAUGOR DIVISION.

Area.

222. The area of the 2nd class reserves is the same as at the close of the previous year. It appears, however, that there is an area of 155 acres which will have to be excluded.

Forest offences.

223. In 67 cases 120 persons were prosecuted for forest offences, and in 60 cases 103 persons were convicted. There were also a number of cases in which compensation was accepted for the value of the produce removed or consumed.

Working of south-east forests.

224. The arrangements for working the south-east forest reserves were as defined in paragraph 256 of the forest report for 1877-78.

Development of revenue from minor produce.

225. Efforts have and are still being made to increase the production of lac, apparently with fair success, while the other minor sources of revenue are being carefully watched and efforts are being made to increase the income therefrom.

226. There has been some change in the arrangements for the supply of fuel from the forests. At first commutation was abolished, the people being required to obtain their supply on licenses for fixed quantities. Subsequently it has been arranged that annual licenses should be given to the inhabitants of villages that have no village forests A reduction in rates has also been sanctioned for all such villages situated more than 8 miles from the Government forests. The arrangements may be right and proper, but it appears to me that to value forest produce by the distance of particular purchaser's residences from the forests is any thing but a correct principle. The Commissioner remarks that owing to commutation being more restricted in this than in any other districts of the division, it has been decided to reduce generally the rates for grass, fuel, &c.

227. The change of system above referred to has resulted in a large decrease in the income from fuel, but, as the Deputy Commissioner remarks, this is not a subject for regret, especially as it must to some extent at least result from the people claiming the exercise of their rights in the village forests. Moreover it has to be borne in mind that until lately Government has been conserving private forests at the sacrifice of its own by giving away its produce for little or nothing.

228. The following statement gives the yield of the 2nd class reserves in this division and the number of cattle grazed :—

Yield and working.

	Teak.										Grazing.		
	Stumps and pieces.	Poles.	Poles of other kinds.	Timber of other kinds.	Building wood.	Firewood.	Charcoal.	Bamboos.	Grass.	Thorns.	Buffaloes.	Cows and bullocks.	Goats and sheep.
No.	197	15,368	411	169	.	...	...	83,744	...	...	41,218	1,76,557	14,303
Cart load	...	.	...	...	1,065	19,294	852	...	91	942		...	...
Jothi load	..	...	.	.	49	4			...	.	...		...
Buffalo, poney and donkey load	...	...	...	...	269	2,641	151	...	112	...	...		...
Banghy load	...	...	..	...	.	13	...	...	..	...	...		..
Head load	...	...	...	..	11,544	39,605	6,355	...	4,120	878	...	...	...

229. Notwithstanding the decrease above referred to, the receipts exceed those of the previous year by over Rs. 7,000, which is due to a very considerable rise in the grazing dues.

Receipts and charges.

Regarding the increase the Commissioner remarks: "The increase under "grazing (18,727 to 32,351) is remarkable, and due not to increased rates but to "more efficient arrangements to prevent evasion."

The actual receipts and charges were as follows:—

Receipts	... ...	Rs. 50,557
Charges	... ...	„ 17,659
Surplus	...	„ 32,898

In the expenditure is included two-thirds of the control charges, as the administration of these forests occupies fully two-thirds of the divisional officer's time. Of the total expenditure it is estimated that Rs. 5,472 is debitable to forest conservation and the balance against revenue.

DAMOH DIVISION.

Area.

230. The area of the reserves is the same as in the previous year.

231. In 32 cases 58 persons were prosecuted, and in 31 cases the conviction of 45 persons was secured. The number of prosecutions is larger than in the previous year but is nevertheless not excessive.

Forest offences.

Improvements.

232. On this subject I will quote here from Colonel Thompson's own report :—

"The blocks specially reserved about Damoh and elsewhere are the same as last year I repeat what I said last year."

1st Damoh Reserve.

		Acres.			Acres.
1.	Damoh	400	8	Kota-tola	900
2	Rajnagar	700	9	Chopra	50
3.	Ahrora	500	2nd	Jamunia	3,800
4	Pati-sispur	200	3rd	Singhpur	1,525
5	Lakhunpur	1,313	4th	Mogra	5 805
6	Hathni	814	5th	Hathibhar	4,591
7	Piparia	716			

"The only blocks that have hereto been reserved previous to the late orders under the Act are noted in the margin."

"The first block includes the hills adjoining the Damoh town and station on which it was deemed necessary to try and to secure reboisement and of the large area of forest adjoining these hills and extending right away to the Morhur river which was reserved as a commencement of arrangements for conservation round Damoh. We hoped to find some spot fit for timber forest to prepare other areas for foreign supply which after being rehabilitated by a few years' conservancy could be drawn upon for some years, whilst the other half of the forest now open and the forests to the east which have been literally almost rooted out were allowed as good long rest"

"The portion capable of yielding timber is small I fear, but there is a considerable are, which with a few more years' nursing will supply a large quantity of firewood enabling us gradually to bring the whole of the forest about Damoh into proper condition. Teak is found in a portion of this reserve, but owing to the severe frosts that occur in these localities it comes to nothing Possibly as the hills get more clothed and the other trees spring up, it may be saved, we may then secure teak poles which near Damoh are very valuable. It is not the tops only that suffer, but the whole of the trees seem to be killed by the frosts, even trees 8 or 10 years of age,

"Notwithstanding the very severe frosts of last year this block shows considerable improvement Though it is going on but slowly still reboisement is going on steadily. The jungle has been so hacked by the people of the town that nothing but stumps and thorns remained New tendu, lendiya, saj are showing, and little kind of coppices forming here and there I think it would be a great pity to abandon these blocks, which will, in time, grow up into thick jungle and will be invaluable to supply poles and firewood for Damoh.

"I found in my tours of inspection this year that the valleys of the hills to the east of Damoh give promise of good forest. Here and there there is very promising teak, and bija, rohun, lendiya and other woods, and they do not seem to suffer from frosts as the forests of the south of Damoh do This is very remarkable; I cannot account for it I thought of closing them and opening out portions of the forest to the south of Damoh, which do not seem thriving, owing to the excessive damage from frost, which recurs year after year and which will be useful as grazing ground.

2nd block, Jamunia

"The 2nd block noted in the margin is, as I last year reported, doing very well, teak and bija are coming on very well. It time it will help largely in supplying Damoh with building poles and timber. The bambus are fast recovering and will in another couple of years be very valuable.

3rd block, Singhpur

"The 3rd block is also improving, but it has suffered sadly from the severe frosts of the last 2 years, which are the severest I have ever seen here, and are said to be the severest known for many years.

4th and 5th blocks, Mogra and Hathibhar

"Are improving slowly, but owing to the proximity of the Punnah State it is almost impossible to keep out fires. The bambus in these forests have been allowed rest for some time and are now again being used, but under as careful a supervision as I can arrange for. The bija in these forests is also coming on very favorably

"Besides these the blocks noted in paragraphs 32 and 33 of last year's report given in the margin, are still under special care. The improvement in all these has been very great. In a few places I have been able to get thorns cut out by the neighbouring villages for the sake of "nistar" which I allowed gratis.

Southern forests.

Buteria,	Gorkha,
Lorhi,	Tindni,
Singhpur,	Ganga,
Tehmagaon,	Minhora,
Bugduri,	Chunatia,
Kulmali,	Bhunwarpani.

"The forests I especially mentioned in paragraph 33 last year and which I detail again are doing well. The reduction of cutting under commutation has done them great good.

Northern forests.

Ghogra,	Gumari,
Putni,	Sagoni.

"No separate proposal is made of area to be withdrawn from commutation, as the number of commuters had been so much reduced by the modification of the system.

Thinnings.

"For the reasons given last year nothing has been done in this direction, but I am having certain useless trees cut out of certain blocks as suggested by you last year. I have continued the system commenced last year and reported on in paragraph 34, according to which people agreeing to cut the creeping thorns out of a forest are allowed "nistar" free of charge. I have this year got 10 blocks cleared in this way. I have the clearing done first and then being satisfied as to the work I allow the people "nistar."

Plantations.

"I last year described what has been done in the way of planting in the (Kishun talao) nursery. The bambus there are getting on very well and a number of "Sheeshum" trees are beginning to run up, and are I think safe from frost. We have also saved a few "Carob" trees.

"The bambu seed I spoke of last year as promised me did not reach me till the 17th July last, when I sowed 7 maunds in 2 plots in which wells were available. In places the seedlings struck very strong and healthy. In others, in dips especially, they did not seem so healthy and have remained quite short, only a few inches high. I have been watering them a little, just sufficiently to keep them alive, and they will be planted out as suggested in your letter No. D91 of 14th June 1879 in June next. If we can get them to grow in the "Kishen talao" reserve on the northern exposures they will prove invaluable.

Forest fires.

"The fires have been less numerous than last year, care having been taken in burning lines where the malguzari forest marches with the reserve. But it is not possible to check them effectually without a grant of money, which you will not secure for me, though admitting that it is required. The special reserves have not as yet any of them been burnt this season.

233. In the general system of management there has been no change except that from the articles included under commutation building wood was excluded. The possible expediency of again allowing it to be taken under commutation is adverted to in the district report, but I should doubt the expediency of a retrograde movement in this respect though in the first instance the restriction may have been a little premature.

Receipts and charges.

234. The receipts and charges have been as follows:—

	Rs.
Receipts	43,330
Charges	11,114
Surplus ...	32,216

In this case one half the outlay may be fairly debited to forest conservation

235. The receipts have been rather less than in the previous year. The revenue from grazing, grass, firewood, charcoal and minor produce shows a steady increase. Under the head of minor produce the increase amounts to Rs. 2,924, due mainly to the district officer's success in increasing the produc-

tion of lac. The decrease is on account of commutation fees and timber. That under the head of timber is due to less teak having been cut, while the smaller income from commutation is attributed to the exclusion of timber from the commutation licenses, a number of people having refused to commute in consequence. But this must be regarded as a temporary decrease, which will be made up for in after years.

SEONI DIVISION.

Area.

236. The area of the reserves has undergone no change; there are 196 square miles, 163 acres of unreserved forests that are managed collectively with the reserves.

Boundaries.

237. For 9 miles along the limits of the Ulut-Bhyri reserve where it borders on Balaghat the boundary was cleared to a width of 20 feet. The rest of the boundaries are maintained, and in some cases are reported to be in really good order.

Forest offences.

238. There were 28 cases in which 52 persons were charged with forest offences, and 52 persons convicted. Besides the foregoing there were 234 cases in which compensation was paid and which were not taken into Court. A large proportion of these were cause of abuse of commutation licenses. Such cases should in my opinion be taken into Court.

Management.

239. As I was unable to inspect any of these forests during the past year I give here the following extract from the divisional officer's report relating to this subject:—

"In last year's report details were given of preliminary schemes for working the Khawasa, Agree, Hathagarh, Ugli, Amargarh, and Dalal blocks. During the year under report these blocks have all been worked by rotation compartments according to the plans sanctioned. During the year under report, plans for working the Ugli and Kariaphar forests and for the future management of the Chapara reserves were submitted, and sanctions have been received; the management and working of these according to the plans have come into force from the 1st April 1880.

"The Ugli forest areas have been divided into three blocks, two of these blocks have been divided into three compartments, each and one in four compartments. The whole forest has been left open for removal of dry wood, thorns, fibre and grass, and one compartment of each block is to be opened for four years for removal of wood of unreserved kinds of girth from 9 inches to 2½ feet. Special permission is required for cutting wood of the reserved kinds or over 2½ feet of the unreserved kinds.

"Kariapahar forest has an area of about 27 square miles; it has been divided into seven compartments and treated such as the Ugli forests except that one compartment will be open only for one year.

"The Chapara reserves consists of the Bijna and Bhairobun blocks, and contains an area of about 77 square miles. The whole of this range is open for the removal of dry wood for fuel, fencing wood, fibre, grass, thorns, but for the cutting of the valuable kinds of trees whether reserved or unreserved, special permission is necessary, and four tracts have been set apart for cutting; this precaution was absolutely necessary owing to the denuded and bare condition of the Chapara hills.

"Grazing and removal of minor forest produce is allowed in all the reserves.

"All the reserves situated in the Seoni tahsil are now being worked by rotation and according to preliminary working plans, which a few years hence may require to be slightly modified.

"In the Seoni tahsil only a few small insignificant tracts remain unreserved, but about one-third if not more of the Government forests in the Laknadon tahsil are unreserved.

"Of the reserve one large tract (the Chapara hills) has been brought under systematic management, and it is hoped that during the coming year 1880-81, plans for the regular working of several of the other most important reserves will be made out and submitted for sanction.

"Coppice in Amergarh block. In compartment No. 3 according to working plan the cutting back of the badly grown teak was carried out during the past year.

"The total number of trees felled amounted to 1,125 which gave 1,017 saleable pieces; these have been stacked at Amergarh. The cost of cutting and carriage of wood to depot amounted to Rs. 89-9-0."

240. The following statement gives the yield of the forests in the more important products, and the number of cattle grazed therein.

	Teak poles.	Pieces.	Cartloads.	Head load.	Jothies.	Grazing. Cows and bullocks.	Buffaloes.	Goats.
Poles of other kinds ..	1,017	15,107	...	...	...	1,66,568	2,745	4,066
Building wood ..	...	...	2,329	9,855	57	...	...	...
Wood for fencing ...	...	...	241	1,842	...	...	...	...
Fuel ...	...	...	4,993	30,670	...	...	...	..
Charcoal ...	...		664	4,265	...	...	...	...
Bambus ..	...	256,450	1,038	16,845	...	...	.	...
Grass ...	...	...	767	12,052	...	...	...	...

Receipts and charges.

241. The receipts and charges have been as follows :—

Receipts	...	Rs. 50,143
Charges	...	„ 11,302
Surplus		„ 38,841

The receipts show an increase of nearly, Rs. 5,000 on those of the previous year, which is satisfactory.

MANDLA DIVISION.

Area.

242. The district return shows that 800 acres have been excluded from the reserves, leaving a balance at the close of the year of 1,405,295 acres.

Forest offences.

243. There were 97 prosecutions in which 129 persons were charged, and the conviction of 125 persons obtained.

244. For one tahsil the Deputy Commissioner has I understand prepared a map in which the important forest tracts and those of less value are separately delineated.

245. An expenditure of Rs. 1,500 on the formation of reservoirs to store water for the convenience of persons grazing cattle in the Government forests was sanctioned, but the work has not yet been carried out. Seeing the large income derived from grazing it is evident that expenditure of this kind may in some cases be expedient.

246. A commencement has been made in collecting the hurra crop on account of Government, and though the crop has been a very bad one, it is expected to give a profit of Rs. 2,000, while Government has never before derived more than Rs. 1,000 from this source. Efforts have also been made to keep cultivation within proper bounds without checking its extension.

247. The increased expenditure on establishment has been attended with a very large increase in the revenue, which has risen from Rs. 43,320 in 1878-79 to Rs. 96,157 in the year under report, thus giving an increase of Rs. 52,837, which may be attributed to more efficient check on the grazing of cattle. The grazing dues amounted to Rs. 80,430 against Rs. 25,935 in the previous year.

Receipts and expenditure.

HOSHANGABAD DIVISION.

Area.

248. The area is the same as at the close of the previous year.

Boundaries.

249. The clearing of lines 10 to 20 feet wide round the reserves where they adjoin private estates has progressed.

Forest offences.

250. There were only 14 prosecutions, in which 23 persons were charged and 21 convicted. But besides these there were 1,233 cases, in which the parties concerned were allowed to pay double dues. On this subject the Deputy Commissioner writes as follows:—

"The revenue realized by double charges for grazing without license has risen from Rs. 116 to Rs. 3,329. This is a very great leap, and it seems to me that there must have been either great laxity before in watching this branch of the revenue or the increase is due to unauthorized pressure. There has been no such special demand for pasture by the cattle of this or neighbouring districts as to account for the increase. Further inquiries are being made, and the officer in charge of the forests has been directed to warn his subordinates not to exercise any improper pressure.

There has been much greater energy in dealing with all breaches of the forest laws as may be seen from the increased number of cases taken up magisterially as well as departmentally."

251. As long as license vendors connive at forest offences it can scarcely be expected that offences will decrease, and it seems to me that the following extracts from the Deputy Commissioner's report, which also relate to the suitability of the present arrangements for meeting the wants of the people, accounts in some measure at least for the comparatively large number of offences.

"Vendors of licenses are now located at suitable places all along the borders of the forests, and as far as I know no difficulty has been experienced in obtaining licenses by those wishing to remove forest produce. On the contrary, there is an inclination on the part of vendors to side with the outside public in defrauding Government revenue, and to issue licenses after the forest produce has been removed without a license, so as to save the persons removing the produce from punishment, and his produce from confiscation. I tried a case of this kind only a few days ago. Many other cases are believed to have occurred, but they are very difficult of detection. There is some clashing too between malguzars and Government areas. It is not unusual for a person to take produce from a Government forest, and when it is stopped at a forest post to set up the plea that the produce was removed from a malguzar's forest. Still with all drawbacks the licensing system as regards timber, firewood and charcoal, bambus and other minor produce has worked fairly well and without oppression, but I am not satisfied about the grazing."

"The rates themselves are not, I think, open to any objection; but licenses are troublesome to the people, notwithstanding all the care that has been taken to make them as little oppressive as possible. In themselves the licenses are simple enough, and I do not see how they are to be simplified more, but the mere fact of having to take out a license is a trouble, and there is the further trouble of having all forest produce removed under that license subsequently checked."

252. The Deputy Commissioner also refers to some friction between the Forest establishment and malguzars, owing, it is said, to the former exceeding the powers laid down in pages 185 and 186 of the printed Digest of the Chief Commissioner's Circulars. In this matter I would submit that unless such

forests are being formally dealt with under the Forest Act, the Forest establishment should have no authority whatever in such matters, and nothing should be required of it beyond making reports for the information of the Deputy Commissioner, who should, in my opinion, arrange to dispose of such matters through some other agency. No good can come of a measure so well calculated to make the Forest establishment unpopular.

Yield and working.

253. The yield of the forests is given below :—

Produce.	Number.	2 bullock cart load.	4 bullock cart load.	Buffalo load.	Jothi load.	Head load.
Building wood and wood for agricultural purposes	8,437	4,037	146	19	157	6,934
Firewood and charcoal	...	24,249	3,200	992	...	19,753
Bambus	325,200	...	...	...	...	...
Grass	...	12,644	1,757	...	...	29,519

The following statement shows the number of cattle grazed.

	On annual license.	On license for short period.	Total.
Cows and bullocks	80,255	97,165	177,420
Buffaloes	24,291	11,025	35,316
Goats and sheep	1,598	33,654	35,252

Receipts and charges.

254. The receipts amounted to Rs. 47,393, and the charges to Rs. 18,554, thus leaving a surplus of Rs. 28,839. Of the receipt Rs. 3,349 on account of a few sleepers drawn from these forests, and allowing that Rs. 1,660 resulted from extra dues on account of produce being removed without license, there is still an increase of Rs. 2,500, over the income of the previous year.

NIMAR DIVISION.

Area.

255. There has been no increase or reduction of the area of the reserves, but it seems probable that accurate survey will bring to light many errors in the present recorded area.

Demarcation.

256. The demarcation work done has already been recorded in Chapter II, as the blocks taken in hand were those to be classed at once as 1st class reserves.

Forest offences.

257. There were 8 prosecutions, in which 11 persons were charged. In 7 cases the conviction of 9 persons was obtained. Besides the foregoing there were 120 cases in which 262 persons were involved but in which prosecution was not resorted to, the offenders being allowed to pay for the produce.

Protection from fire.

258. Certain blocks aggregating 10,700 acres about to be made first class reserves were placed under protection, particulars regarding which are given in paragraph 114.

259. In the Jambupani forests it was found that much damage had been done by reckless cutting. The matter has been separately referred since the close of the year and it has been decided to close them almost entirely.

160. 6,340 households commuted for grass and fuel against 6,682 in the previous year ; the decrease is said to be due to households clubbing together and using one license, a system of cheating that it is difficult to guard against.

261. The yield of the 2nd class reserves is given in the following state ment together with the number of cattle grazed therein :—

	Teak.		Building wood.	Wood for agricultural purposes.	Dhaora axles.	Firewood.	Charcoal.	Bambus.	Grass.	Grazing.		
	Bullcs.	Pieces, &c.								Buffaloes.	Cows and bullocks.	Sheep and goats.
No.	6,759	6,224	...	...	...	...	...	...	...	27,854	1,06,479	6,351
2 bullock cart load ...	...	...	244	471	262	5,336	14	1,252	2,153	...	...	...
4 bullock cart load ...	...	...	...	...	...	26	...	...	4	...	...	...
Bullock load ...	...	...	727	24	...	1,137	63	4	1,423	...	...	...
Head load ...	...	...	5,320	309	59	9,991	400	9,503	9,816	...	...	...
C. ft. stacked ...	...	...	...	...	...	1,275	...	...		...	...	...

Receipts and charges.

262. The receipts amounted to Rs. 37,873 and the charges to Rs. 17,883, thus leaving a surplus of Rs. 19,990.

263. As in a reference to a report to the effect that private forests in Nimar are being overworked, the district officer expresses his regret that the Forest department is not able to draw off the demand from these forests, it will not be out of place here to note that until lately the action of Government has tended to the conservation of private forest at the expense of those belonging to the State. The work on which the Forest department has recently been engaged will however, in a very short time, relieve these private forests of a very heavy demand.

BETUL DIVISION.

Area.

264. The transfer to the 1st class reserve of the Gohar, Sarunpur and Hurrai blocks has reduced the area of the 2nd class reserves, from 550,640 to 545,452.

Forest offences.

265. There were 5 cases in which 19 persons were charged and convicted of forest offences.

Receipts and charges.

266. The receipts amounted to Rs. 30,970, the charges to Rs. 15,145, thus giving a surplus of Rs. 15,824. The charges are high in consequence of the Forest officer attached to the division for the greater part of the year being in the highest grade of controlling officers. Two-thirds of his salary and travelling allowance have been debited against these forests, to which most of his time has been devoted. The receipts are less than those of the previous year by Rs. 5,360. In explanation of which fact the Deputy Commissioner remarks that in the previous year the income from minor produce was abnormally large, while in the current year people removing produce have been more cautious to protect themselves with passes and thus the realizations from confiscation and double dues have been less.

NARSINGHPUR DIVISION.

Area.

267. The area of the reserves remains unchanged.

Forest offences.

268. There were 11 prosecutions for forest offences, in which 23 persons were charged and convicted.

269. The Deputy Commissioner in his annual report discusses at some length the merits of the license system introduced towards the close of 1878-79, but it is only necessary here to note that it has afforded some protection to the forests, though it appears to have caused a slight decrease in the income.

Receipts and charges.

270. The receipts amounted to Rs. 9,896, and the charge, to Rs. 3,077, thus giving a surplus of Rs. 6,819. It is not improbable that in the current year the receipts will rise to a higher figure than has yet been attained.

CHHINDWARA DIVISION.

Area.

271. The area of the reserves has undergone no change.

Boundaries.

272. The clearing of boundaries between private lands and the Government forest was continued during the year, and it is reported that the boundaries running with these lands of 38 villages remain to be cleared.

Forest offences.

273. There were only 8 cases in which 9 persons were prosecuted for forest offences; there were 473 cases in which compensation was paid, but of these 379 were trivial.

Squatters.

274. As cultivation by squatters has much to do with the clearance and destruction of forests it is worthy of note that the number of squatters in the reserves at the close of the year was 2,339 or the same as in the previous year. Efforts have been made to recover by agreement one or two blocks of good forest originally given out on clearance lease, but up to date without success; negotiations are however still in progress.

275. The yield of the forests and the number of cattle grazed during the past year is shown in the following statement :—

	Teak.									Grazing.		
	Dead wood.	Poles.	Building wood.	Brush wood.	Firewood.	Charcoal.	Bambus.	Grass.	Thorns.	Buffaloes.	Cows and bullocks.	Sheep and goat.
No. ...	...	2,294	...	...	...	...	66,407	..	...	1,15,556	25,088	7,734
Cart load ...	144	...	531	1,379	3,898	3	76	6,689	830	...	...	...
Jothi load ...	6	...	3,407	247	1,256	...	1,117	...	62	...	...	...
Bullock load ...	...	...	1	1	1,606	316	127	1,267	...	...	...	...
Banghy load ...	...	...	...	...	2	...	...	3	...	...	...	...
Head load ...	1	...	1,559	1,667	12,683	795	4,813	29,153	292	...	...	...

276. The receipts and charges were as follows:—

Receipts	...	Rs. 26,661
Charges	...	„ 12,601
Surplus	...	„ 14,060

There was an increase in the receipts from bambus, due it is said to the removal of restrictions enforced in the previous year. Under almost every other head there has been a decrease, which the Deputy Commissioner attributes to the large quantity of wood cut in private forests, the low level of the water in the Kanhan, the outlet for the Kamptee market, the restriction of the period for which licenses are allowed to hold good, the restriction of charcoal burning to three months of the year, and the partial failure of the mhowa crop.

RAIPUR AND SAMBALPUR DIVISIONS.

277. Regarding forest administration in Raipur and Sambalpur, I quote here the following extract from a letter from the Commissioner of the Division :—

Area of forests.

" No change took place in the areas of the Raipur or Sambalpur Government forests, which were as in the previous year.

Raipur 1,376 square miles.
Sambalpur 715 square miles.

Demarcation of forests.

" The demarcation of the Government forests of the Sambalpur district was nearly completed during the year, but in the Raipur district nothing under this head has yet been done."

System of management.

" The system of management in Raipur was the same as in the previous year, except, that the duty on minor produce, such as mohwa, lac, wax, honey and gums, was held under direct management instead of being farmed out, and when the outstandings are realized the net increase of income obtained will be considerable. There are however, serious defects in the working of the collecting agency, and these defects engaged the special attention of Mr. Mc-Minn during the year under report; but as yet no measures have been devised for remedying them. It is also desirable to arrange for the forests being worked by blocks, and for duty on firewood and grass being fixed at lower rates than at present prevail. These matters will have attention during the current year. During my visit to the Sambalpur district in the cold weather of 1878-79, I was much struck with the evidences of general dissatisfaction which existed on the subject of the forest arrangements introduced by the Deputy Commissioner, but I trusted that this feeling would die away. During my visit in February and March last, however, I found the feeling as strong as ever, while the criminal returns showed that 1,015 persons had been prosecuted for forest offences during 1879-80, and in one instance, I believe 47 persons were sent up from one village alone. On the other hand the rules, although irksome to the people, omitted to provide against wasteful consumption, for the holder of an annual license was allowed to remove an unlimited quantity of the kinds of forest produce specified in the license, and consequently while the orders of Government which direct the utmost consideration to be shown to the people when introducing new forest restrictions were overlooked, the forests were left unprotected from wasteful cutting. I therefore in my letter No. 2844, dated 21st ultimo, asked the Deputy Commissioner to adopt from the 1st July next, certain modifications of his scheme, which will have the effect I think of removing reasonable causes of discontent, and will at the same time protect the forests against wasteful consumption. The Deputy Commissioner wishes to work his rules in part through the Police, but I am strongly averse to this being done, for as long as we keep the District Police unconnected with forest management so long have we some kind of safe-guard that any general abuses or apprehension done under cover of forest rules will be brought to notice through or by the Police. But if we make the Police part of the forest agency we do away with that safe-guard, and close the main channel through which mal-practices or acts of oppression would otherwise come to the knowledge of the District officer. And the arrangement would be specially dangerous in Sambalpur, for it can be gathered from the Deputy Commissioner's report that there is already a risk of official pressure being brought to bear on the Gaontias and villagers to induce them to commute in a body."

Gross receipts.

"Excluding the fixed forest assessment paid by zamindars the gross collections in 1879-80 and the previous year were:—

		1878-79. Rs.	1879 80. Rs.		Difference. Rs.
Raipur	...	49,770	51,208	+	1,438
Sambalpur	...	12,757	9,726	—	3,031

The increase in Raipur does not call for remark, but the decrease in Sambalpur of nearly 23 per cent is noteworthy, and the Deputy Commissioner explains it by saying that a great number of villages have declined to commute and now draw their supplies from private forests. Rs. 12,757 obtained in 1878-79 is by no means a large sum to receive from 715 square miles of forest, and that this sum should have decreased by Rs. 3,031 shows that the financial effect of the rules in force during 1879-80 was bad."

Cost of establishment.

"The cost of establishment was:—

		1878 79. Rs.	1879 80 Rs.	Increase. Rs.
Raipur	...	6,581	6,695	114
Sambalpur	...	1,650	2,880	1,230

And the proportion of cost of establishment to the gross receipts collected by them was:—

		1878 79. Rs.	1879-80. Rs.		Difference. Rs.
Raipur	...	13·4 per cent	12·7	—	0·7
Sambalpur	...	13·0 „	29·6	+	16·6

While the net revenue realized was:—

		1878 79. Rs.	1879-80. Rs.		Difference. Rs.
Raipur	...	44,049	46,123	+	2,074
Sambalpur	...	11,107	6,846	—	4,261

Thus in the Raipur district the Government forests gave a net revenue of Rs. 33 and in Sambalpur of Rs. 9 only per square mile.

Forest prosecutions.

"The number of persons prosecuted for forest offences during the year was—

		1878-79.	1879 80.
Raipur	...	5	47
Sambalpur	...	130	1,015

Of the 47 persons prosecuted in the Raipur district 37 were convicted, and the Deputy Commissioner adds, "the number of convictions is still by no means excessive, though I doubt whether all of them have been strictly legal, *e. g.*, I find that in some few cases persons have been convicted under Section 32 of the Forest Act for cutting wood of the prohibited kinds within the limits of their own villages. It is satisfactory to note that side by side with increase of convictions there has been a decrease of departmental penalties, which have fallen from 112 to 72." Of the 1,015 persons prosecuted in the Sampalpur district, 937 were convicted. The Deputy Commissioner explains that this extraordinary number of presecutions was due to the fact that the accused persons removed forest produce contrary to the rules in force and that under the law such offenders must be prosecuted. But the difficulty really rested not in the law but in the rigorous nature of the rules which made those acts offences, and on 15th October last I wrote to the Deputy Commissioner drawing his attention to the remarks contained in the Government letter forwarded under the Chief Commissioner's Circular No. 4 of 11th February 1873, and advising him to act with patience and consideration when first working forest restrictions in the Sambalpur district. The Deputy Commissioner, however, did not relax his rules in any way, and it was not until I had marched through the district in February and March last that I was able to ascertain the exact points which pressed most hardly on the people, and to devise myself the relief which should be given. While then these prosecutions were perfectly legal the course pursued by the Deputy Commissioner in persisting in enforcing rules which he should have seen were unsuitable was mistaken, and has resulted in discontent among the people and in a considerable decrease of forest revenue.

Conservation of forests.

Nothing appears to have been done during the year towards closing and restoring such portions of the forests as have been overcleared. Last year the Deputy Commissioner of Raipur proposed to pay special attention to the question, but it appears to have been over-

looked. The matter, however, is one of importance to the Raipur district, and the Deputy Commissioner will be asked to take it up and endeavour to work out some practicable scheme for attaining the object in view.

Zamindari forests.

"With the advent of the Chhattisgarh railway the value of the zamindari forests in the Raipur and Bilaspur districts will much increase, and it is therefore more than ever desirable to have these forests managed on a proper system. During the year under report something was done towards impressing on zamindars a sense of their responsibilities in this respect, and measures will be taken to enforce those responsibilities should the zamindars continue to neglect them. A commencement was also made of the work of revising the forest assessments of the non-feudatory zamindars of the Raipur district.

Village reserves.

"In the Sambalpur district 183 khalsa villages possess patches of carefully preserved jungle and planted timber, locally known as "Jhar barbans," and there is hardly a village in the Division which could not arrange to have a similar small reserve of preserved jungle from which to draw for the common good of the village community leaves, sticks and firewood, and in favorable situations timber, mohwa, hurra and other valuable forest produce in addition. The matter is one which has had my attention since 1872, and I took advantage of Chief Commissioner's Book Circular No. I. of 1879 to ask the several Deputy Commissioners to do what they could to obtain the general adoption of the scheme of village reserves. Of course cases such as that mentioned by the Deputy Commissioner of Raipur in which persons were criminally punished for cutting reserved kinds of timber growing on their own lands must necessarily hinder the adoption of the scheme, but I trust that such cases will not recur."

BILASPUR DIVISION.

Area.

278. The area remains unchanged and the Deputy Commissioner reports that the pillars and trijunction marks defining the forests are all in good order and easily distinguishable.

Forest offences.

279. The return of prosecutions is blank, but the districts officer's report shows that in 14 cases 20 persons were punished under the Penal Code for theft of timber.

280. Regarding the work of the past year there is nothing for which an appropriate place can here be found except that a small bambu nursery was formed and some teak was planted, it is said, with good result.

Receipts and charges.

281. The receipts amounted to Rs. 17,924 and the charges to Rs. 2,306, thus giving a surplus of Rs. 15,618.

CHAPTER IV.

General Remarks.

282. The Telunkheri estate, which is kept up chiefly for experimental forest cultivation, could not properly be referred to, in either of the preceding chapte About 1¼ acre of swamp was planted with bambu in 1879, the ground bei previously deeply trenched and the plants put out on the raised ridges; a fe mango seeds were also sown in the lines, and these with a spontaneous growt of babul have sprung up with the bambu and now form a dense crop. The trenching was expensive but the total cost did not exceed 60 rupees.

283. At the same time about 3 acres of the worst and most unproductive piece of land on the whole estate was taken in hand. Part of this area had absolutely no soil, consisting of trap nodules closely packed with more or le disintegrated rock. Pits 3 feet in diameter and 1 foot deep for bambu and 1 inches in diameter and 18 inches deep for trees were dug and filled with go soil; 520 bambus, 169 tinus, 172 anjun and 75 teak were put out. On poorest part the bambus were watered and did well; on the remaining area ab one third died from want of moisture. All the trees took readily and onl require protection.

284. In the bambu plantings of previous years some damage was done by rats, but there is still a goodly stock on the ground which is doing well, though for the reasons given in the previous year's report it is not every where equally vigorous.

285. The other sowings and plantings of previous years are coming on well. They furnish most striking evidence of the increased production resulting from high cultivation and irrigation in the first year of a forest growth. On a small portion of the area the first true thinnings were made this year.

286. Nine hundred sweet lime trees were raised for budding; on 875 of the previous year's stock, orange buds were set: 620 budded orange trees were distributed to forest gardens and 80 sold. Some seed grain was also supplied to model farm.

287. The expenditure on this estate, including the cultivation of exotics to be referred to hereafter, the cost of murseris and plantations amounted to Rs. 2,393 and the receipts to Rs. 1,563. The orange crop was again a bad one, an ordinary crop would have brought in at least Rs. 500 more.

288. In letter No. 63F of 5th November 1878 from the Secretary to the Government of India, Department Revenue, Agriculture and Commerce, attention was directed to the establishment of forest gardens, but not much has yet been done in this direction. Including under this head small areas used for the experimental cultivation of indigenous or exotic forest trees, the formation of orchards and the cultivation on a small scale of farm crops, Kirgaon in the Khandwa reserve, Punassa, Rakur, Korai and Moharli are the only places besides Telunkheri where forest gardens at present exist.

289. Those at Rakur, Korai and Moharli have been chiefly devoted to the cultivation of forest trees, and at present call for no remark except that efforts are being made to ensure their covering their expenses.

290. In the Punassa garden, in spite of the severe frots which did much harm, and failures in some experiments, the crops raised nearly covered the expenditure. Rice failed and gram was a partial failure, but Indian corn gave 1,500 lbs. to the acre. In the Kirgaon 3 acres of orange grove has been established and is doing well. On 35 acres field crops were raised with the following results:—

Crop.		Total yield.	Yield per acre.
Jowari	...	14,024 lbs.	763 lbs.
Tilli	...	3,276 „	252 „
Gram	...	840 „	210 „

The jowari suffered from the early frosts and the gram was severely injured by late frosts. I regret not at present being able to quote the exact charges against these crops.

Exotics.

291. I will now record the result attained in the cultivation of exotics.

292. The mahogany seed received in 1879 was almost all bad and only a few seedlings were obtained at Nagpur and Chanda. In all 205 are alive and are being planted out. The stock previously put out at Chanda and Moharli are up to the present doing well, but I fear that the soil may not prove rich enough for their after-growth. At Nagpur there are two trees of 18 and 20 feet that are doing very well, they are in a moist and rich soil, and have grown up under cover of larger trees, space being kept clear to admit light directly above them. The other trees at Telunkheri have not done quite so well, and appear to find difficulty in contending with the grass roots which will spread. They are however growing fairly well.

293. The carob is thriving splendidly at Rukur at the top of the Korai Ghat, and is doing fairly well at Chanda. At Kirgaon in Nimar the tree was thriving, but sufferred from frost. At Korai the young trees are not very healthy.

294. The misquit bean has been tried in a variety of soils, and in several different localities, but is nowhere doing really well, unless it be at Garhakota the plants at which place are favorably reported on.

295. The Pithécolobium saman is thriving at Rukur, Korai, Chanda and Ahiri. In Nagpur they have made little progress though fairly healthy, and in Nimar they have suffered from frost.

296. From the seed of Eucalyptus saligna received but a limited number of seedlings have been raised. At Nagpur the young plants were in spite of every precaution taken off as fast as they appeared above ground. 210 trees have been planted out in Chanda and are doing well, at Rukur and Korai of 152 plants put out only 52 are alive. At Nagpur the trees raised are thriving. There are a few trees in other places of which nothing can at present be recorded.

297. Except at Nagpur the chief enemy of this species has been the white-ants. In Chanda however their ravages were stopped by the application of castor oil to the roots.

298. In several places in this and the previous year's reports the severe frosts that have occurred have been adverted to. It is true that these frosts were exceptional so far as the past 20 years are concerned, but the injury done by them has been very great and the fear of their recurrence is a source of extreme anxiety. They have been general and are not therefore attributed to conditions brought about by forest conservation. Nevertheless it has been set forth as an opinion by Forest officers in the Mandla division that the protection of forests from fire has increased the intensity of the frosts within the forests protected, and it is said that the opinion is suported by subordinates and others residing in or in the vicinity of these forests. The opinion I believe to be correct in so far as any tracts having a large expanse of open forest or grass lands are concerned.

299. That protection from fire has tended to increase the humidity of the forests protected is a fact beyond dispute. It now in some cases forms the subject of comment even among the hill people, and it is probable that this may result in more intense cold, but it is possible that a more powerful agent in creating frost may be found in a standing crop of dry grass. I have observed that young trees suffer most from frost when surrounded by grass, *i. e.* when they stand above it. There is one instance on record in which in a plantation containing nearly 60,000 toak, two-thirds of the plants disappeared in the first year that gass was left round them. The precise cause of the deaths was not then determined, but it is not improbable that they resulted from frost. This subject among others furnishes an interesting field for experiment.

300. The necessity of some modifications in the grades of the subordinate establishment will form the subject of a separate reference. In the highest grade of subordinates the estabilshment is extremely weak; and on the salaries fixed for the lower grades of the intermediate class men fit for the smallest possible executive charges are not to be obtained. As compared with the control charges the present cost of the executive staff is very small, and I am of opinion that at the present time nothing will tend so much to the advancement of forest conservancy and the increase of the revenue as an increase in the number of forest rangers.

301. Much difficulty has during the past year been experienced owing to the insufficient strength of the office establishment, which have in almost every case been overworked and still have not been able efficiently to perform the duties required of them. This deficiency has thrown on the superior officers an undue amount of clerical work the time given to which might otherwise have been more profitably employed. To permit this deficiency to continue would be false economy.

302. The Forest establishment has as a whole worked well, and it may be said in reference to a larger proportion of the establishment that its efficiency has materially increased. The weak section of the establishment is that of the Forester class. In this class though there are several very deserving and worthy subordinates who if they continue to work as well as heretofore will surely become Forest rangers, the class as a whole does not come up to the necessary standard of efficiency.

303. Of the gazetted officers I would first mention Mr. Thompson, Deputy Conservator, and Mr. McKee, Assistant Conservator, who have temporarily left the Provinces. They served under me for the greater part of the year, and it is with much satisfaction that I am again able to testify to their zeal, energy and ability. The loss of their services has been a heavy one to these Provinces.

304. In the heavy and important charge of the Nimar Division Mr. Fernandez, Assistant Conservator, has rendered excellent service, and has continued to maintain his high reputation as a Forest officer.

305. In the Saugor division Mr. Foster, Assistant Conservator, has during the past year been very successful in all his undertakings. Mr. Hooper, Assistant Conservator, who has been attached to my office, rendered excellent service and proved himself a most valuable Assistant; while in the Ahiri sub-division Mr. Taylor, Officiating Assistant Conservator, has displayed tact, zeal and ability in the management of the heavy works entrusted to him.

306. Of the Forest Rangers I would mention Mahomed Ghouse, Forest Ranger of the 1st Grade, Chunder Kumar Chatterji, Forest Ranger 2nd Grade, Mahadeo Rao Pulmaitkar, Forest Ranger 4th Grade, Mahomed Khadur Bux, Forest Ranger 5th Grade, and Ganpat Rao, Forest Ranger 6th Grade.

307. Mahomed Ghouse has for some time held charge of two divisions, the work of which he has conducted to my satisfaction. Chunder Kumar Chatterji has been nominated as a probationer for the class of Sub-Assistant Conservator.

J. C. DOVETON,

Conservator of Forests,

Central Provinces.

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Annual Form No. 45B.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Unreserved Forests, for 1879-80.

Division or Range.	Name of Forest.	Area on 1st April 1879		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880.		No. and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
Seoni Division ...	Seoni district ...	196	1,25,587	...	...	...	...	196	125,587		
Nagpur „ ...	Nagpur „ ...	5	3,066	3	1,934	...	...	8	5,000		Resumption of clearance lease.
Civil Officer ...	Damoh „ ...	21	13,715	...	...	...	...	21	13,715		
Chanda „ ...	Chanda „ .	...	...	...	114	...	...	...	114		
	Total ..	222	142,368	3	2,048	...	...	225	144,416		

Form No. 47.

FOREST DEPARTMENT, CENTRAL PROVINCES.

rea of Forest tracts protected from fire during the dry season of 1880 (to accompany Report for 1879-80.)

sion.	Forest tracts.	Up to 30th June 1879.		During dry season of 1880.				Total cost up to 30th June 1880.	Year when protection commenced.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected.	Amount expended.		
			Rs. a. p.				Rs. a. p.	Rs. a. p.	
on ...	Hathibari ...	2,123	2,554 12 4	2,123	640	1,483	115 11 3	2,670 7 7	June 1870.
	Kuntranala ...	2,366	97 3 3	3,548	3,548	...	15 11 3	112 14 6	do. 1876.
...	Banjar valley ...	48,349	2,197 0 5	49,495	37,120	12,375	434 7 5	2,631 7 10	do. 1875.
	Motinala ...	1,659	181 2 1	1,659	...	1,659	49 10 0	230 12 1	do. 1875.
	Jagmundal ...	24,197	18,059 1 5	24,503	246	24,257	421 0 1	18,480 1 6	do. 1867.
	Chuharigogarh ...	1,661	4,599 1 10	1,661	8	1,653	75 1 2	4,674 3 0	do. 1867.
	Barela ...	7,124	1,179 12 9	7,153	7,153	...	74 15 10	1,254 12 7	do. 1872.
	Airi ...	...	8 4 9	2,150	...	2,150	10 12 0	19 0 9	do. 1878.
lpore ...	Singrampur ...	6,555	1,639 3 10	6,555	...	6,555	131 7 8	1,770 11 6	do. 1871.
	Bijeragogarh ...	21,188	3,803 0 11	21,188	...	21,188	441 7 1	4,244 8 0	do. 1871.
ngabad.	Rajaborari ..	92,147	1,846 4 2	102,125	2,280	99,845	549 1 11	2,394 6 1	do. 1875.
	Saonligarh ...	60,630	1,232 7 10	70,251	1,700	68,551	316 7 2	1,548 15 0	do. 1875.
	Bori ...	23,480	11,945 15 3	39,480	200	39,280	1,010 2 4	12,956 1 7	do. 1864.
...	Kalibheet ...	62,075	503 9 1	62,080	80	62,000	278 10 0	782 3 1	do. 1874.
	Punassa ...	62,960	2,538 10 3	72,080	7,080	65,000	807 14 7	3,346 8 10	do. 1875.
	Chandgarh ...	24,950	472 5 10	61,440	12,555	48,885	391 15 4	864 5 2	do. 1878.
	Khandwa ..	34,594	994 4 0	35,840	772	35,068	795 2 2	1,789 6 2	do. 1878.
	Bainpura ...	...	... .	600	...	600	42 0 0	42 0 0	do. 1879.
	Gunjari ...	...	... ...	3,500	...	3,500	111 0 0	111 0 0	do. 1879.
	Undria ...	...	... ...	3,100	...	3,100	23 4 3	23 4 3	do. 1879.
	Bhojwa & Beheria.	...	... .	2,000	180	1,820	22 0 0	22 0 0	do. 1879.
	Ajnal ...	...	... ...	15,000	...	15,000	57 13 9	57 13 9	do. 1879.
...	Bowergarh ...	33,920	2,283 5 10	38,720	15,360	23,360	397 11 1	2,681 0 11	do. 1875.
	Khamapur ...	15,800	344 9 3	16,000	10,880	5,120	82 11 8	427 4 11	do. 1875.
a ...	Bemaram ...	12,296	7,751 9 0	12,296	...	12,296	1,184 13 5	8,936 6 5	do. 1873.
	Mirkullu ...	8,479	4,267 9 6	8,479	10	8,469	909 4 7	5,176 14 1	do. 1875.
	Taroba ...	25,599	5,371 0 10	25,619	...	25,619	1,147 3 4	6,518 4 2	do. 1873.
	Goverdhun ...	13,817	3,139 12 0	13,931	250	13,681	619 4 7	3,759 0 7	do. 1874.
...	Korai ...	30,810	6,659 2 2	31,210	190	31,020	527 4 7	7,186 6 9	do. 1869.
	East Pench ...	40,960	3,078 1 6	42,580	11,200	31,380	445 8 3	3,523 9 9	do. 1875.
	Nagalwari ...	9,680	538 3 6	9,680	155	9,525	192 14 11	731 2 5	do. 1878.
	Paraspani ...	3,680	34 2 0	8,240	90	8,150	63 2 0	97 4 0	do. 1879.
	Sakata ...	...	... ...	10,020	...	10,020	125 8 0	125 8 0	do. 1880.
...	Garhakota ...	2,899	65 11 1	2,899	...	2,899	20 6 0	86 1 1	do. 1874.
	Hathkho ...	7,698	952 3 0	10,598	...	10,598	410 8 4	1,362 11 4	do. 1874.
	Ranjir ...	1,987	43 6 2	1,987	...	1,987	7 3 6	50 9 8	do. 1874.
	Ranipura ...	2,720	44 15 10	2,720	...	2,720	51 15 0	96 14 10	do. 1879.
at ...	Pandratola ..	4,960	110 11 6	4,960	...	4,960	72 10 0	183 5 6	do. 1872.
	Grand Total ...	691,363	88,535 11 2	827,470	111,697	715,773	12,433 12 6	100,969 7 8	

Charged in previous years	...	...	...	83,019 9 1
Charged in 1879-80	...	...	...	*11,248 9 8
Charged in 1880-81	...	...	...	6,701 4 11
			Total ...	100,969 7 8

* There was also expended in Erjarh and Dhuga Rs. 68-9-3 and in Tigora Rs. 2.

Annual Form No. 48.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest rules, 1879-80.

Forest Division and Civil District.	Injury to forests by fire.		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.			
									Prosecutions.		Convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1st Class Reserves.												
Direction ...	...	...	...	...	...	..	...	...	...	...	...	...
Mandla Division ...	1	1	15	44	3	3	...	...	19	48	18	43
Jubbulpore " ...	...	...	...	...	...	...	...	...	...	...	...	...
Hoshangabad " ...	...	...	..	...	...	...	...	...	...	...	...	...
Betul " ...	..	...	6	6	3	3	...	..	9	9	4	4
Nimar " ..	2	2	...	...	1	1	2	9	5	12	5	12
Chanda " ...	...	...	...	..	..	...	...	...	...	...	...	...
Seoni " ..	...	...	4	18	...	...	...	...	4	18	2	3
Saugor " ...	2	2	6	8	2	2	3	7	13	19	12	17
Total ...	5	5	31	76	9	9	5	16	50	106	41	79
2nd Class Reserves.												
Nagpur District ...	...	...	2	3	5	24	...	...	7	27	7	27
Bhandara " ...	...	...	30	52	11	37	..	..	41	89	38	85
Chanda " ...	1	2	28	51	..	...	1	2	30	55	21	46
Wardha " ...	3	4	30	56	8	34	5	15	46	109	35	73
Balaghat " ...	...	...	18	60	...	...	..	...	18	60	16	55
Jubbulpore " ...	2	6	47	178	120	566	7	15	176	765	168	741
Saugor " ...	3	6	50	83	7	11	5	20	67	120	60	103
Damoh " ...	1	1	16	25	2	3	13	29	32	58	31	45
Seoni " ...	...	...	27	53	1	1	...	...	28	54	28	52
Mandla " ...	...	...	93	110	4	19	...	...	97	129	97	125
Betul " ...	...	...	5	19	...	...	...	...	5	19	5	19
Chhindwara " ...	2	2	6	7	...	...	...	..	8	9	7	8
Hoshangabad " ...	...	...	14	23	...	...	...	...	14	23	14	21
Narsinghpur " ..	...	..	11	22	...	...	...	...	11	22	11	22
Nimar " ...	...	...	8	11	..	...	...	...	8	11	7	9
Raipur " ...	...	...	24	47	...	...	...	...	24	47	20	37
Sambalpur " ...	5	5	334	536	172	216	235	258	746	1,015	696	937
Bilaspur " ...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	17	26	743	1,336	330	911	266	339	1,358	2,612	1,261	2,405
Grand Total ...	22	31	774	1,412	339	920	271	355	1,408	2,718	1,302	2,484

Annual Form No.

FOREST DEPARTMENT,

Summary of Revenue and Expenditure of the different

Budget heads.	Direction.	Mandla Division.	Jubbulpore Division.
RECEIPTS.	Rs.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government Agency:—			
a. Timber	23 12 4	24,795 14 7	64 0 0
b. Firewood and Charcoal	.....	239 3 6	.....
c. Bambus	.....	1,686 10 11	137 11 5
d. Sandal-wood	.....	.....	.....
e. Grass and other Minor Produce... ...	1,132 4 8	1,927 5 9	4 5 3
II.—Timber and other produce removed from the forests by consumers or purchasers:—	.....	.....	.....
a. Timber	17 8 0	21 15 0	2,289 2 6
b. Firewood and Charcoal	.....	8 7 0	3,880 12 1
c. Bambus	7 10 8	50 4 0	474 7 8
d. Grazing and Fodder Grass	6 13 0	1,598 3 11	9,826 15 11
e. Other Minor Produce	11 8 0	15 15 0	3,401 1 10
III.—Confiscated drift and waif wood ...	.....	69 15 0	253 6 6
IV.—Revenue from forests not managed by Government:—			
a. Duty on Foreign Timber and other Forest Produce ...	.....	.....	.....
b. Revenue from Shared and Private Forests ...	.....	.....	.....
V.—Miscellaneous:—			
a. Fines and Foreitures	.....	3 0 0	8 7 3
b. Refunds	3 14 8	25 13 0	.....
c. Other Sources	32,529 8 2	168 4 0	15 14 0
Total Receipts ...	33,732 15 6	30,610 15 8	20,336 4 6
BUDGET HEADS.			
A.—Conservancy and Works.			
I.—Timber and other produce removed from the forests by Government Agency:—			
a. Timber	15 0 0	13,213 8 2	24 13 6
b. Firewood and Charcoal	.....	52 8 7	.....
c. Bambus	.....	353 0 2	17 0 0
d. Sandal-wood	.....	.....	.....
e. Grass and other Minor Produce... ...	74 2 0	421 0 9	6 0 0
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	.....	4,804 14 10
III.—Confiscated, drift and waif wood	.....	16 9 0	.....
IV.—Revenue from forests not managed by Government:—			
a. Duty on foreign timber and other forest produce ...	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....
VI.—Live stock, stores, tools and plant:—			
a. Purchase of cattle	.....	522 5 5	.....
b. Feed and keep of cattle	527 7 11	3,960 9 7	.....
c. Stores, tools and plant	51 0 0	1,855 1 8	9 14 6

Annual Form No. 45A.—*(Prescribed.)*

FOREST DEPARTMENT, CENTRAL PROVINCES,

Area of 2nd Class Reserved Forests, 1879-80.

Division or Range.	Name of Forest.	Area on 1st April 1879.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880.		No. and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
										Chief Commissioner's Notification.	
Jubbulpore Division ...	Jubbulpore District ...	329	210,587	...	...	...	..	329	210,587	No. 887 of 20th Febry. 1879.	
Hoshangabad „ ...	Hoshangabad „ ...	1,221	781,449	...	...	25	16,000	1,196	765,449	No. 917*h* of 24th Febry. 1879.	
Betul „ ...	Betul „ ...	860	550,640	...	..	8	5,188	852	545,452	No. 917*d* of 24th Febry. 1879.	
Nimar „ ...	Nimar „ ...	1,509	965,486	...	...	...	...	1,509	965,486	No. 917*j* of 24th Febry. 1879.	
Chanda „ ...	Chanda „ ...	2,977	1,905,399	...	...	...	...	2,977	1,905,399	No. 917*i* of 24th Febry. 1879.	
Seoni „ ...	Seoni „ ...	554	354,306	...	...	...	...	554	354,306	No. 885 of 20th Febry. 1879.	
Civil Officer „ ..	Chhindwara „ ...	641	410,412	...	...	...	...	641	410,412	No. 917*c* of 24th Febry. 1879.	
Saugor „ ...	Saugor „ ..	733	469,383	...	...	...	...	733	469,383	No. 884 of 20th Febry. 1879.	
Nagpur „ ...	Nagpur „ ..	391	249,998	...	...	...	213	390	249,785	No. 917*b* of 24th Febry. 1879.	
Civil Officers ...	Bhandara „ ...	551	352,640	...	...	...	...	551	352,640	No. 882 of 20th Febry. 1879.	
	Wardha „ ...	199	128,034	...	...	...	...	199	128,034	No. 917*a* of 24th Febry. 1879.	
	Balaghat „ ...	950	608,089	...	...	...	...	950	608,089	No. 883 of 20th Febry. 1879.	
	Damoh „ ...	834	534,743	...	...	...	...	834	534,743	No. 886 of 20th Febry. 1879.	
	Mandla „ ..	2,197	1,406,065	...	...	1	800	2,196	1,405,265	No. 888 of 20th Febry. 1879.	
	Narsinghpur „ ...	193	123,712	...	...	...	...	193	123,712	No. 917*f* of 24th Febry. 1879.	
	Raipur „ ...	1,377	881,280	...	...	...	...	1,377	881,280	No. 5035 of 2nd Decr. 1878.	
	Sambalpur „ ...	715	457,600	...	...	...	...	715	457,600	No. 5036 of 2nd Dec. 1878. No. 917*c* of 24th Febry. 1879.	
	Bilaspur „ ...	649	415,360	...	...	...	...	649	415,360	No. 5037 of 2nd Decr. 1878.	
	Total ...	16,882	10,805,192	...	...	34	22,201	16,848	10,782,991		

		Hoshangabad District.									
Hoshangabad Division	Rajaborari	...	250	1,60,000	3	1,645	...	...	253	1,61,645	Chief Commissioner's Notification
	Bori	...	37	23,680	25	16,000	...	...	62	39,680	
		Hoshangabad and Betul Districts.									
	Saonligarh	...	100	64,000	3	1,771	...	...	103	65,771	
		Betul District.									
Betul Division	Bowergarh	...	118	75,520	...	...	...	...	118	75,520	
	Khamapur	...	166	1,06,240	3	1,772	...	...	169	1,08,012	
		Hoshangabad District.									
	Kalibheet	...	260	1,66,400	...	...	...	...	260	1,66,400	
Nimar Division		*Nimar District.*									
	Punassa	...	143	91,720	...	..	...	...	143	91,720	
	Chandgarh	...	96	61,440	...	...	...	...	96	61,440	
	Khandwa	...	56	35,840	...	..	...	...	56	35,840	
		Ahiri Zamindari in Chanda District.									
Chanda Division	Bimaram	...	19	12,296	...	...	...	...	19	12,296	
	Mirkullu	...	13	8,479	...	...	...	...	13	8,479	
		Chanda District.									
	Moharli	...	359	2,29,498	...	...	...	...	359	2,29,498	
		Balaghat and Seoni Districts.									
	Sonawani	...									
	Korai	...	373	2,38,754	...	...	...	...	373	2,38,754	
Seoni Division		*Seoni and Nagpur Districts.*									
	East Pench	...									
		Chhindwara and Nagpur Districts.									
	West Pench	...	...	...	95	60,938	...	...	95	60,938	
		Chhindwara and Nagpur Districts.									
Chhindwara Division	West Pench	...	95	60,938	...	...	95	60,938	...	...	
		Saugor District.									
	Garhakota	...	5	2,899	...	...	...	...	5	2,899	
	Tigora	...	...	459	...	...	...	...	...	459	
Saugor Division	Ranjir	...	17	11,036	...	...	...	...	17	11,036	
	Ranipura	...	13	8,109	...	...	...	...	13	8,109	
	Hathkho	...	31	19,492	...	...	...	...	31	19,492	
	Total	...	2,501	16,01,266	129	82,126	95	60,938	2,535	16,22,454	

Annual Form No. 45.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1879-80.

Division or Range	Name of Forest and Civil District or Territory	Area on 1st April 1879.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880		No. and date of Notification of additions and transfers &c.	Remarks.
		Square miles	Acres	Square miles.	Acres	Square miles.	Acres.	Square miles	Acres.		
Direction ...	*Bilaspur District.*										
	Hathibari	3	2,123	...	...	...	...	3	2,123		
	Raipur District.										
	Kuntra nalla	6	3,548	...	...	...	...	6	3,548		
Mandla Division ...	*Mandla District.*										
	Jagmundal	38	24,503	...	...	...	...	38	24,503		
	Chubarigogarh	3	1,660	...	...	...	...	3	1,660		
	Banjar valley	78	49,724	...	...	...	...	78	49,724		
	North Phen	10	6,435	.	...	...	...	10	6,435		
	South Phen	72	45,967	...	..	...	...	72	45,967		
	Moti nalla	3	1,658	...	...	...	...	3	1,658		
	Ahiri	3	2,150	...	...	...	...	3	2,150		
	Barela	11	7,153	...	...	...	...	11	7,153		
	Balaghat District.										
	Keolikapa	10	6,296	...	...	...	...	10	6,296		
	Topla	71	45,506	...	...	..	...	71	45,506		
Jubbulpore Division ...	*Jubbulpore District.*										
	Bijeragogarh	33	21,188	...	...	...	...	33	21,188		
	Damoh District.										
	Singrampur	10	6,555	...	...	...	...	10	6,555	No. 917g. of 24th February 1879.	

STATEMENTS

31 8 80 2 and 30 47 338

(*Prescribed.*)—Contd.

Hoshangabad Division.	Betul Division.	Nimar Division.	Chanda Division.	Seoni Division.	Chi Di	Bilaspur District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. p.	Rs. a. p.	Rs. a. p.
146 8 6	.....	338 9 2	.....	.....		.....	1,846 8 11
93 14 6	16 0 0	120 10 10	293 2 0	61 8 6		.....	1,240 1 2
.....	.....	.....	.....	.....		.....	636 5 0
.....	.....	121 7 7	7 2 2	37 14 0			
.....	.....	.....	50 0 0	.....	8	.....	1,226 5 3
.....	.....	.....	468 6 6	.....		.....	50 0 0
.....	.....	3,532 13 5	.....	.....		.....	920 6 4
1,547 7 0	516 6 11	2,390 10 4	3,615 9 8	1,054 0 10	1	.....	3,661 2 5
234 7 9	3 4 6	2,376 10 9	1,385 5 8	1,222 11 0		.....	11,319 2 11
					0	.....	8,836 13 11
16 2 8	1,414 7 4	251 7 0	16 7 0	.....			
.....	.....	.....	.....	.....		2 8 0	2,834 9 7
.....	.. ...	12 14 10	40 7 3	.....		.....	16 10 0
						.....	2,906 0 9
224,48 12 11	9,436 6 11	39,480 6 10	1,52,861 1 9	17,665 0 1	8,3		
					8	2,306 0 9	3,58,380 1 10
... ...	... ...	... ...	... ...	... ...			
5,400 0 0	9,000 0 0	6,932 4 1	11,842 13 8	5,287 1 6	3,5	... ...	14,400 0 0
3,972 11 4	2,165 1 5	5,531 7 7	5,310 6 6	4,897 2 0	5	... ...	77,910 8 7
689 0 0	748 0 0	696 0 0	947 3 1	592 10 1	2	... ...	34,728 12 0
... ...	... ...	... ...	... .	... ...		... ...	9,676 0 3
						... ...	... ...
... ...	... ...	... ...	... ...	... ...			
696 11 0	250 0 0	1,934 2 2	3,210 6 3	1,099 0 0	3	... ...	1,823 11 0
9 6 0	.. ..	48 8 0	63 14 0	13 12 0		... ...	14,500 9 11
120 5 9	24 3 6	123 0 4	2 6 5	91 10 0		... ...	139 7 6
						... ...	776 3 0
35 4 10	8 9 6	0 2 6	11 0 6	26 9 7			
354 15 11	135 11 4	796 11 2	371 3 3	436 4 11	2	... ...	178 4 10
5 2 7	256 7 3	... ...	... ...	300 0 0		... ...	4,503 12 10
.....	.....	... ...	.....	.. ...		... ...	1,522 9 10
55 13 6	59 4 0	196 4 0	321 6 6	107 12 0		... ...	1,593 10 0
209 8 8	48 4 7	208 12 7	133 10 8	189 10 3		... ...	.....
						... ...	2,439 12 2
11,548 15 7	12,695 9 7	16,467 4 5	22,214 6 10	13,041 8 4	5,		
						... ...	1,64,193 5 11
33,997 12 6	22,132 0 6	55,947 11 3	1,75,075 8 7	30,706 8 5	13,7		
					8	2,306 0 9	5,22,573 7 9

Budget heads.	Bhandara District.	Wardha District.	Balaghat District.
BUDGET HEADS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.—*(Contd.)*			
VII.—Communications and Buildings :—			
a. Roads and Bridges	.....	.....	.....
b. Buildings	.....	.....	.....
c. Other Works	.....	50 0 0	.....
VIII.—Demarcation, improvement and extenstion of forests :—			
a. Demarcation	.....	348 3 11	35 0 0
b. Compensation for Land and Rights ...	.....	.....	.....
c. Surveys and Working Plans	.....	28 14 6	.....
d. Plantations	.....	120 6 0	.....
e. Protection from Fire	.....	68 9 3	40 0 0
f. Other Works	.....	17 11 3	46 8 0
IX.—Miscellaneous:—			
a. Refunds	41 6 0	79 12 3	.....
b. Law Charges	.....	.....	.....
c. Other Charges	.....	28 7 10	.....
Total A.—Conservancy and Works ...	3,296 10 0	6,738 10 10	4,957 15 10
BUDGET HEADS.			
B.—Establishments.			
I.—Salaries:—			
a. Conservators	... ...	... ...	... ...
b. Superior Officers	... ...	3,896 10 8	... ...
c. Subordinate Forest and Depot Establishment ...	347 2 2	855 15 4	762 14 8
d. Office Establishments	... ...	... ...	... ...
e. Deputation and Special Allowances ...	... ...	... ...	... ...
II.—Travelling Allowances:—			
a. Conservators	... ...	... ...	... ...
b. Superior Officers	... ...	1,205 1 0	... ...
c. Subordinate Forest and Depot Establishments ...	... ...	... ...	... ...
d. Office Establishments	... ...	... ...	... ...
III.—Contingencies:—			
a. Stationery	... ...	5 3 6	... ...
b. Carriage of tents and records	... ...	194 8 0	... ...
c. Rent, rates, and taxes	... ...	... ...	... ...
d. Pay of Police Guard	... ...	17 2 6	... ...
e. Official Postage	... ...	21 5 6	... ...
f. Sundries	.....	... ...	.....
Total B.—Establishments ...	347 2 2	6,195 14 6	762 14 8
Grand Total of Expenditure ...	3,643 12 2	12,934 9 4	15,720 14 6

49.—(*Prescribed.*)—Contd.

Damoh District.	Mandla District.	Narsinghpur District.	Raipur District.	Sambalpur District.	Bilaspur District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	.....	.....	1,846 8 11
.....	.....	.....	.....	.....	.....	1,240 1 2
.....	.....	.....	.....	.....	.....	636 5 0
.....	55 14 10	.....	.....	555 1 8	.....	1,226 5 3
.....	.....	.....	.....	.....	.....	50 0 0
.....	.....	.....	.....	.....	.....	920 6 4
.....	.....	.....	.....	.....	.....	3,661 2 5
.....	.....	.....	.....	.....	.....	11,319 2 11
329 10 8	.....	.....	.....	6 7 0	.....	8,836 13 11
312 11 8	103 11 7	.....	1 8 0	.....	2 8 0	2,834 9 7
.....	.....	.....	.....	.....	.....	16 10 0
.....	8 0 6	.....	.....	.....	.....	2,906 0 9
10,496 15 9	9,636 15 6	2,991 3 8	6,024 7 10	3,486 2 8	2,306 0 9	3,58,380 1 10
... ...	... ...	... ...	... ...	... ...	... ...	14,400 0 0
... ...	... ...	... ...	... ...	... ...	... ...	77,910 8 7
617 0 0	660 0 0	86 0 0	672 0 0	... ...	... ...	34,728 12 0
... ...	... ...	... ...	... ...	... ...	... ...	9,676 0 3
... ...	... ...	... ...	... ...	... ...	... ...	... ...
... ...	... ...	... ...	... ...	... ...	... ...	1,823 11 0
... ...	... ...	... ...	... ...	... ...	... ...	14,500 9 11
... ...	... ...	... ...	... ...	... ...	... ...	139 7 6
... ...	... ...	... ...	... ...	... ...	... ...	776 3 0
... ...	... ...	... ...	... ...	... ...	... ...	178 4 10
... ...	... ...	... ...	... ...	... ...	... ...	4,503 12 10
... ...	... ...	... ...	... ...	... ...	... ...	1,522 9 10
.....	... ...	... ...	... ...	... ...	... ...	1,593 10 0
... ...	... ...	... ...	... ...	... ...	... ...	.....
... ...	... ...	... ...	... ...	... ...	... ...	2,439 12 2
617 0 0	660 0 0	86 0 0	672 0 0	... ...	... ...	1,64,193 5 11
11,113 15 9	10,296 15 6	3,077 3 8	6,696 7 10	3,486 2 8	2,306 0 9	5,22,573 7 9

Annual Form No. 50.—*(Prescribed.)*

FOREST DEPARTMENT, CENTRAL PROVINCES.

Dr. Account Current for the year 1879-80. **Cr.**

	Rs.	a.	p.	Rs.	a.	p.
To Cash balance on 1st April 1879 ...	...	...	...	8,955	8	3
„ Revenue received	...	..	...	10,06,723	8	9
„ Remittances from State Treasuries ...	...	...	...	9,20,124	0	0
To Inter-Departmental transfers.						
Government of India	987	0	0			
Do. of Madras	91	3	0			
Do. of Bombay	397	9	0			
Department Public Works C. P. ..	11,160	1	11			
Government School of Industry, Jubbulpore	14	0	0			
Normal School Jubbulpore	66	4	0			
Stationery and Printing—Jail Press ...	1,054	3	1			
Law and Justice—Jails	491	11	6			
				14,262	0	6
To Advance recoverable	...	...	..	3,22,877	5	3
„ Deposits	...	...	...	1,192	7	0
To Contribution to funds ...						
Uncovenanted Service Family Pension fund ...	2,140	4	0			
Madras Military fund ..	921	3	0			
General Family Pension fund..	630	0	0			
				3,691	7	0
To Inter-divisional transfers	...	...	..	46,400	12	5
„ Suspense accounts	...	...	..	1,353	3	10
Total ...	...	...	...	19,32,180	11	3

	Rs.	a.	p.	Rs.	a.	p.
By Expenditure	...	...	...	5,22,573	7	9
By remittances to State Treasuries ...						
Central Provinces ...	8,18,988	6	10			
North-Western Provinces ...	142	3	0			
				8,19,130	9	10
By revenue remittance adjusted by book transfer.						
Government of India...	21,357	8	0			
Bombay Military Department	180	0	0			
Government of Punjab	1,350	9	0			
Department Public Works C. P.	1,33,847	15	0			
Government School of Industry, Jubbulpore...	764	13	4			
Police District Executive Force	281	11	0			
Nagpur Municipality...	137	0	0			
Local Fund Chanda, C. P.	15	3	0			
Law and Justice—Jails	148	0	0			
				1,58,082	11	4
By Reward for proficiency in Oriental languages ...	...	...	...	540	0	0
„ Advances recoverable	...	...	..	3,81,073	14	3
„ Deposit repaid...	...	..	...	767	6	3
„ Inter-divisional transfers	...	...	...	46,350	9	11
„ Cash balance on 31st March 1880	...	...	...	3,661	15	4
Total ...	...	..	...	19,32,180	11	3

49.—*(Prescribed.)*

CENTRAL PROVINCES.

Divisions during the year 1879-80.

Hoshangabad Division	Betul Division.	Nimar Division.	Chanda Division.	Seon Division.	Chhindwara Division.	Saugor Division.	Nagpur Division.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
10,939 6 10	60 7 11	10,648 7 10	1,16,737 2 4	11,732 2 5	12 9 0	240 10 0	.....
193 10 0	.....	10,896 13 1	.....	13 0 0	.....	.....	.....
.....	0 3 0	141 10 5	861 14 1	1,033 10 9	.....	4 9 7	.....
.....	.....	.....	.....	.....	.....	.....	.....
750 0 10	82 10 4	1,080 3 9	3 0 0	3 15 6	.....	578 2 4	.....
.....	.....	6,015 0 6	12,302 12 6	9,433 8 2	1,170 3 1	197 3 0	0 7 0
11,416 0 2	6,337 14 0	6,293 9 1	11,086 10 9	3,728 14 2	3,586 15 0	4,554 6 9	3,091 5 1
5,108 13 3	6,015 14 6	2,493 4 5	8,683 14 1	2,881 9 6	969 2 0	8,971 5 8	3,782 5 6
5,933 0 7	2,788 10 4	8,965 8 8	13,342 11 9	7,769 7 7	4,179 9 3	944 2 0	920 10 0
28,827 13 4	20,182 6 0	25,631 7 11	33,391 3 11	31,692 0 0	18,938 11 3	37,121 3 3	18,112 10 3
6,254 11 6	5,694 2 2	1,635 5 11	9,860 8 9	2,935 4 10	2,092 13 4	4,452 4 5	1,450 14 8
460 8 0	1 0 0	215 9 2	268 10 7	332 8 2	149 8 11	1 9 6	2,024 8 0
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	75 10 0	.....	150 0 0	14 9 9	.....	.....
6 0 0	0 12 2	30 1 3	73 1 8	5 15 6	10 0 0	0 4 5	16 2 2
2,464 0 0	2,229 12 9	2,379 14 3	649 6 8	3,439 6 0	58 4 0	594 5 5	1,211 11 11
72,354 0 6	43,393 13 2	76,802 10 3	2,07,861 1 1	75,151 6 7	31,182 5 7	57,660 2 4	30,610 10 7
6,814 2 0	86 4 5	5,886 15 3	1,02,044 1 3	4,075 2 2	.....	175 11 10	.....
44 0 8	.....	9,856 15 1	.....	.....	.....	.....	.....
.....	.....	71 12 0	163 2 11	124 3 0	.....	164 6 0	.....
.....	.....	.....	.....	.....	.....	.....	.....
78 0 8	16 2 6	862 0 10	125 3 10	89 0 3	.....	131 9 3	.....
12,255 13 2	7,380 1 3	12,775 15 2	11,035 8 10	9,575 10 1	8,228 10 3	12,746 1 10	7,289 11 7
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	90 0 0	1,454 9 11	.....	.....	.....	.....
909 3 0	.....	241 7 10	5,440 8 4	253 8 9	.....	.....	.....
249 1 0	3 12 0	550 0 9	26,721 6 5	271 5 6	.....	65 0 0	.....

Budget heads.	Bhandara District.	Wardha District.	Balaghat District.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
RECEIPTS.			
I.—Timber and other produce removed from the forests by Government Agency :—			
a. Timber	.....	2,395 10 6	.....
b. Firewood and Charcoal	.....	355 14 3	.....
c. Bambus	.....	42 1 3	.....
d. Sandal-wood	.....	.....	.....
e. Grass and other Minor Produce	.....	1,680 9 5	.....
II.—Timber and other produce removed from the forests by consumers or purchasers:—	.....	.....	10,556 14 9
a. Timber	4,300 0 9	3,040 4 1	599 10 0
b. Firewood and Charcoal	16,297 2 10	5,888 10 3	2,109 8 11
c. Bambus	175 9 6	13 14 2	1,081 7 4
d. Grazing and Fodder Grass	18,989 2 7	12,196 15 9	11,125 7 11
e. Other Minor Produce	1,052 6 7	2,110 4 11	1,196 0 4
III.—Confiscated drift and waif wood	58 3 6	19 0 0	30 9 1
IV.—Revenue from forests not managed by Government:—			
a. Duty on Foreign timber and other Forest produce ...	.....	.....	.....
b. Revenue from Shared and Private Forests ...	.....	.....	.....
V.—Miscellaneous:—			
a. Fines and Forfeitures	205 10 0	1,381 9 9	206 13 11
b. Refunds	.....	2 4 3	50 0 0
c. Other Sources	.....	6 12 9	.....
Total Receipts ...	41,078 3 9	29,133 15 4	26,956 8 3
BUDGET HEADS.			
A.—Conservancy and Works.			
I.—Timber and other produce removed from the forests by Government Agency:—			
a. Timber	.....	614 14 3	.....
b. Firewood and Charcoal	.....	122 14 3	.....
c. Bambus	.....	12 10 0	.....
d. Sandal-wood	.....	.....	.....
e. Grass and other Minor Produce ...	.....	1,043 9 9	.....
II.—Timber and other produce removed from the forests by consumers or purchasers	3,255 4 0	3,976 5 10	4,836 7 10
III.—Confiscated drift and waif wood	.....	.....	.....
IV.—Revenue from Forests not managed by Government :—			
a. Duty on Foreign timber and other Forest produce ...	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government... ...	.....	.....	.....
VI.—Live stock, stores, tools and plant:—			
a. Purchase of cattle	.....	.....	.....
b. Feed and keep of cattle	.....	89 8 6	.....
c. Stores, tools, and plant	.....	136 11 3	.....

(Prescribed.)—Contd.

Damoh District.	Mandla District.	Narsinghpur District.	Raipur District.	Sambalpur District.	Bilaspur District.	Total.
Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	29 2 8	.....	.....	.....	.....	1,77,679 6 5
.....	.....	.....	.....	.....	.....	11,698 6 10
.....	65 1 3	.....	.....	.....	.....	3,973 8 8
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	7,242 9 10
1,814 14 9	4,431 0 11	.....	.....	.....	3,402 0 0	49,624 0 8
3,124 12 11	1,483 2 0	1,737 5 4	.....	8,744 0 3	1,817 9 7	778,71 1 5
2,129 3 0	1,989 0 8	1,622 2 10	24,951 4 0	29 12 0	1,479 3 2	99,291 7 8
780 5 3	1,463 4 8	718 7 3	.....	4 9 6	1,739 10 5	51,353 6 7
25,934 13 6	80,429 13 4	4,367 6 10	22,668 14 3	360 8 3	8,142 5 6	4,09,545 0 8
9,077 6 5	3,151 10 3	1,373 14 6	3,464 15 0	562 2 0	976 10 9	60,770 1 2
56 11 0	182 2 1	4 11 0	.....	25 2 9	.....	4,153 11 3
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
184 5 10	3 0 0	14 4 3	105 0 0	.....	50 8 6	2,402 15 3
18 9 11	.....	1 0 0	.....	.....	.....	243 15 0
208 10 3	2,929 8 8	57 4 6	1,615 0 0	.....	316 0 0	50,873 11 4
43,329 12 10	96,156 14 6	9,896 8 6	52,805 1 3	9,726 2 9	17,923 15 11	10,06,723 8 9
.....	.....	.....	.....	.....	.....	1,33,850 8 10
.....	.....	.....	.....	.....	.....	10,076 6 7
.....	.....	.....	.....	.....	.....	906 2 1
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	2,846 13 10
9,793 9 5	8,350 13 7	2,991 3 8	6,022 15 10	2,024 10 0	2,303 8 9	1,30,547 5 11
.....	.....	.....	.....	.....	.....	16 9 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	1,118 7 0	.....	.....	.....	.....	1,118 7 0
54 0 0	.....	.....	.....	.....	.....	2,120 15 4
7 0 0	.....	.....	.....	.....	.....	11,489 5 11
.....	.....	.....	.....	.....	.....	29,913 5 1

Budget Head.	Direction.	Mandla Division.	Jubbulpore Division.
BUDGET HEADS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS.			
VII.—Communications and Buildings:—			
a. Roads and Bridges	.....	1,361 7 3	.....
b. Buildings	27 10 0	550 3 5	29 12 3
c. Other Works	.....	586 5 0	.....
VIII.—Demarcation, improvement and extension of forests:—			
a. Demarcation	.....	19 12 6	.....
b. Compensation for Land and Rights ...	.....	.....	.....
c. Surveys and Working Plans ...	.....	407 1 4	.....
d. Plantations	7 15 0	.....	.....
e. Protection from Fire	131 8 0	858 7 3	524 15 6
f. Other Works	104 4 6	1,260 14 0	10 9 6
IX.—Miscellaneous:—			
a. Refunds	500 0 0	1 7 1	67 12 0
b. Law Charges	.....	0 10 0	.....
c. Other Charges	2,768 10 0	43 3 4	.....
Total A.—Conservancy and Works ...	4,207 9 5	25,484 2 6	5,495 12 1
BUDGET HEADS.			
B.—ESTABLISHMENTS.			
I.—Salaries:—			
a. Conservators	14,400 0 0	... ...	... ...
b. Superior Officers	3,500 0 0	16,200 0 0	2,075 0 0
c. Subordinate Forest and Depot Establishments ...	722 14 4	3,066 1 0	1,887 0 0
d. Office Establishments	4,403 8 0	730 4 9	242 0 9
e. Deputation and Special Allowances ...	... ...	... ...	... ...
II.—Travelling Allowances:—			
a. Conservators	1,823 11 0	... ...	... ...
b. Superior Officers	498 8 0	3,334 10 6	348 0 0
c. Subordinate Forest and Depot Establishments ...	... ...	... ...	3 15 6
d. Office Establishments	194 1 9	111 6 4	... ...
III.—Contingencies:—			
a. Stationery	26 5 1	40 10 4	4 10 0
b. Carriage of tents and records ...	559 0 2	754 4 6	90 9 2
c. Rent, rates and taxes	405 0 0	316 0 0	... ...
d. Pay of Police Guards	.....	.....	... ...
e. Official Postage	302 0 6	71 9 6	47 6 0
f. Sundries	618 15 3	531 9 1	64 9 5
Total B.—Establishments ...	27,454 0 1	25,156 8 0	4,763 2 10
Grand Total of Expenditure ...	13,661 9 6	50,640 10 6	10,258 14 11

31-8-80—3 C.—48—338

Annual Form No. 55—(*Prescribed.*)—Contd.

Division.	Forest.	Description of Timber, &c.,	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks.
Seoni ...	Rukhur ...	Saj logs ...	5	...			
	Korai ...	Jungle wood sleepers ...	6,177	...			
	Rukhur ...	Teak poles ...	3,318	...			
	Korai ...	Do. ...	553	...			
	Telia ...	Do. ...	495	...			
	Ambagarh ...	Do. ...	1,017	...			
	Korai ...	Lendia poles ...	166	...			
	Rukhur ...	Saj poles ...	2	...			
	Korai ...	Do. ...	26	...			
	Do. ...	Kari poles ...	2	...			
	Do. ...	Moondi poles ...	1	...			
	Telia ...	Sheshum poles ...	12	...			
	Do. ...	Dhamun poles ...	2	...			
	Do. ...	Bihra poles ...	50	...			
	Rukhur ...	Teak pieces ...	135	...			
	Korai ...	Do. ...	4	...			
	Telia ...	Do. ...	50	...			
	Ambagarh ...	Do. ...	40	...			
	Rukhur ...	Do. cartloads ...	228	...			
	Korai ...	Do. ...	23	...			
	Ambagarh ...	Do. ...	5	...			
	Rukhur ...	Saj pieces ...	5	...			
	Korai ...	Do. ...	1	...			
	Telia ...	Do. ...	1	...			
	Rukhur ...	Dhamun pieces ...	1	...			
	Do. ...	Sheeshum pieces ...	2	...			
	Telia ...	Do. ...	3	...			
	Rukhur ...	Beeja pieces ...	6	...			
	Telia ...	Do. ...	3	...			
	Rukhur ...	Doura pieces ...	4	...			
	Do. ...	Tendu pieces ...	3	...			
	Korai ...	Khair pieces ...	2	...			
	Do. ...	Khumbi pieces ...	1	...			
	Do. ...	Lendia pieces ...	2	...			
	Telia ...	Do. ...	2	...			
	Do. ...	Hardu pieces ...	2	...			
	Do. ...	Teak pieces, cartloads ...	106	...			
	Rukhur ...	Tinsa pieces ...	6	...			
	Do. ...	Bija slabs ...	7	...			
	Korai ...	Do. ...	8	...			
	Rukhur ...	Saj slabs ...	31	...			
	Korai ...	Anjan slabs ...	25	...			
	Kukhur ...	Fuel cart loads ...	38	...			
	Korai ...	Do. ...	14	...			
	Rukhur ...	Bambus ...	2,336	...			
	Telia ...	Do. ...	10,075	...			
	Korai ...	Do. ...	19,900	...			
	Nagpur ...	Do. ...	4,125	...	49,020	...	
Saugor ...	Saugor ...	Teak poles ...	222	...			
	Chitole ...	Saj poles ...	3,426	...			
	Garhakota ...	Teak bullee ...	1	...			
	Do. ...	Kardai log ...	1	...			
	Saugor ...	Babul logs ...	12	...			
	Do. ...	Babul pieces ...	12	...			
	Do. ...	Bambus ...	10,180	...	13,854	...	
Wardha ...	Arvi ...	Teak poles ...	5,680	...			
	Do. ...	Teak posts ...	356	...			
	Do. ...	Teak stumps ...	808	...			
	Do. ...	Teak feloes ...	100	...			
	Do. ...	Pieces common kinds ...	603	...			
	Wardha ...	Do. ...	10	...			
	Arvi ...	Ber kanas ...	8,874	...			
	Do. ...	Fuel, maunds ...	450	...			

Annual Form No. 55.—(*Prescribed.*)—Concld.

Division.	Forest.	Description of Timber, &c.	No. of		Total of each Division.		Remarks.
			Pieces.	Cubic feet.	Pieces.	Cubic feet.	
Wardha ...	Wardha ...	Fuel, maunds ...	160	...			
	Do. ..	Do. cartloads ...	154	...			
	Do. ...	Bambus ...	500	...			
	Arvi ...	Do. ...	936	...			
					18,631	...	
Jubbulpore ...	Singrampur ...	Teak mulgas ...	864	...			
	Do. ...	Mulga sutkutta ...	43	...			
	Do. ...	Saj and doura mulgas ...	35	...			
	Do. ...	Teak bullees ...	598	...			
	Do. ...	Teak korria ...	149	...			
	Bijeragogarh ...	Pieces of rejected sal sleepers	474	...			
	Singrampur ...	Bambus ...	14,100	...			
					16,263	...	
		Total ...	...	...	3,05,304	5,16,939	

31 8 80 2 and 1 C 46 338

Annual Form No. 56.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account of Timber and other produce 1879-80.

Particulars.		Pieces.		Total.	
		No.	Cub. ft.	No.	Cub. ft.
Balance in hand at commencement of the year.					
Logs round	Teak	10,668	97,926		
	Sal	918	40,374		
Logs squared	Teak	236	2,546		
	Sal	8	78		
Logs other than teak and sal		618	4,136		
Scantlings	Teak	42,318	49,669		
	Sal	112	304		
	Other than teak and sal	633	1,428		
Sleepers	Teak	17,589	22,521		
	Sal	8,657	28,694		
	Other than teak and sal	7,026	9,355		
Planks	Teak	5,044	5,247		
Slabs	Teak	1,479	5,539		
	Other than teak and sal	126	541		
Pieces marketable	Teak	3,894	11,390		
	Sal	196	...		
	Other than teak and sal	1,039	23		
Poles	Teak	31,131	...		
	Other than teak and sal	816	...		
	Boats	27	...		
	Bambus	2,68,352	...		
	Fuel	...	41,162	4,00,887	3,20,933
Carried over				4,00,887	3,20,933

Particulars.		Pieces.		Total.	
		No.	Cub. ft.	No.	Cub. ft.
Removed by purchasers.					
Logs round	Teak	1,072	20,577		
	Sal	184	4,844		
Logs squared	Teak	24	323		
	Sal	...	...		
Logs other than teak and sal		5	...		
Scantlings	Teak	2,899	2,501		
	Sal	6	12		
	Other than teak and sal	1	1		
Sleepers	Teak	24,468	32,623		
	Sal	5,375	10,982		
	Other than teak and sal	16,588	5,113		
Planks	Teak	326	656		
Slabs	Teak	100	...		
	Other than teak and sal	72	...		
Pieces marketable	Teak	19,971	1,199		
	Sal	351	...		
	Other than teak and sal	1,312	386		
Poles	Teak	36,390	...		
	Other than teak and sal	9,273	...		
	Boats	9	...		
	Bambus	183,232	...		
	Fuel	3,509	199,458	3,05,167	2,79,075
Carried over				3,05,167	2,79,075

Annual Form No. 56.—(*Prescribed.*) Contd.

Particulars.		Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Brought forward ...				4,00,887	3,20,933
Received during the year.					
Logs round ...	Teak ...	6,711	76,666		
	Sal ...	1	17		
Logs squared ...	Teak ...	181	2,628		
	Sal ...	...	...		
Logs other than teak and sal ...		7,221	85,418		
Scantlings ...	Teak ...	42	30		
	Sal ...	22	64		
	Other than teak and sal ..	1	2		
Sleepers ...	Teak ...	42,623	57,872		
	Sal ...	8,829	18,722		
	Other than teak and sal ...	48,278	42,799		
Planks	Teak ...	465	947		
Slabs ...	Teak ...	100	...		
	Other than teak and sal ...	1,471	...		
Pieces marketable..	Teak ...	19,855	...		
	Sal ...	624	...		
	Other than teak and sal ...	2,133	386		
Poles ...	Teak ...	23,245	...		
	Other than teak and sal ...	20,476	...		
	Boats ...	130	...		
	Dongas ..	118	...		
	Bambus ...	1,17,542	...		
	Fuel ...	5,236	2,31,388	3,05,304	5,16,939

Particulars.		Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Brought forward ...				3,05,167	2,79,075
Lost or used by department.					
Logs round ...	Teak ...	3,921	52,117		
	Sal ...	140	6,079		
Logs squared ...	Teak ...	21	135		
	Sal ..	1	6		
Logs other than teak and sal ...		6,511	82,444		
Scantlings ...	Teak ...	381	403		
	Sal ...	32	...		
	Other than teak and sal ...	317	1,256		
Sleepers ...	Teak ...	4,742	1,292		
	Sal ...	471	2,036		
	Other than teak and sal ...	6,797	1,725		
Planks	Teak ...	1,436	1,613		
Slabs ...	Teak ...	827	3,073		
	Other than teak and sal ...	125	538		
Pieces marketable..	Teak ...	23	...		
	Sal ...	1	...		
	Other than teak and sal ...	8	23		
Poles ...	Teak ...	1,094	...		
	Other than teak and sal ...	614	...		
	Boats ...	10	...		
	Bambus ...	47,160	...		
	Fuel ...	...	...	74,632	1,52,740

Annual Form No. 51.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Outstandings and Liabilities on account of Contractors and Disbursers for 1879-80.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings.)	By Department (Liabilities.)	
	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	
Direction ...	.....	5,469 15 8	5,469 15 8	444 3 9	5,238 14 5	5,683 2 2	213 2 6	.....	Total debits under advances recoverable during the year as per account current ...Rs. 3,81,073 14 3
Mandla Division ...	.....	22,291 15 7	22,291 15 7	2,140 10 7	24,476 10 9	26,617 5 4	4,325 5 9	.....	
Jubbulpore " ...	.....	7,064 13 11	7,064 13 11	94 10 9	7,206 3 9	7,300 14 6	236 0 7	.....	
Betul " ...	.....	3,571 4 3	3,571 4 3	130 12 1	3,503 9 5	3,634 5 6	63 1 3	.....	Total payments during the year as per this return ...Rs. 3,50,107 0 6
Hoshangabad " ...	.....	14,005 4 3	14,005 4 3	696 8 4	13,949 8 4	14,646 0 8	640 12 5	.....	
Nimar " ...	12 5 10	32,126 11 3	32,139 1 1	468 3 4	33,138 3 4	33,606 6 8	1,469 12 7	2 7 0	
Chanda " ...	.....	1,86,451 4 4	1,86,451 4 4	26,133 10 4	2,10,905 4 1	2,37,038 14 5	50,587 10 6	0 0 5	
Seoni " ...	.....	27,017 15 3	27,017 15 3	1,513 13 10	26,373 10 8	27,887 8 6	869 9 3	.....	Difference ...Rs. 30,966 13 9
Saugor " ...	.....	6,112 11 1	6,112 11 1	711 15 11	5,614 0 7	6,326 0 6	213 5 7	0 0 2	
Nagpur " ...	.....	6,982 11 9	6,982 11 9	58 14 11	7,038 0 9	7,096 15 8	114 3 11	.....	Represents amount adjusted to credit of "advances recoverable" in 1879-80 to secure agreement with the balance as exhibited in the Deputy Accountant General's books, in which all sums drawn by the Forest Department from Treasuries prior to 1870-71 were debited to "5—Forests."
Chhindwara " ...	.....	8,911 2 7	8,911 2 7	30 3 9	8,881 4 8	8,911 8 5	0 5 10	.....	
Wardha " ...	.....	2,756 7 4	2,756 7 4	265 11 7	3,656 9 9	3,922 5 4	1,165 14 0	.....	
Balaghat " ...	.....	115 0 0	115 0 0	40 0 0	105 0 0	145 0 0	30 0 0	.....	
Narsinghpur " ...	.....	... ...	... ...	... ...	20 0 0	20 0 0	20 0 0	.....	
Total ...	12 5 10	3,22,877 5 3	3,22,889 11 1	32,729 7 2	3,50,107 0 6	3,82,836 7 8	59,949 4 2	2 7 7	

31 8 80 1 & 20 44 338

Annual Form No. 52.—*(Prescribed.)*

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Outstandings on account of revenue, 1879-80.

Division.	Outstandings at commencement of year.			Value of sales and other revenue during year.			Total.			Amount realized during year.			Balance due to the Department at end of year.			Remarks.
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	
Direction	...	...	...	33,733	0	4	33,733	0	4	33,732	15	6	0	0	10	
Mandla Division	5,929	13	11	27,950	13	0	33,880	10	11	30,610	15	8	3,269	11	3	
Jubbulpore Division	...	...	...	20,656	4	5	20,656	4	5	20,356	4	5	300	0	0	
Hoshangabad „	...	...	...	72,354	0	6	72,354	0	6	72,354	0	6	...	...	...	
Betul „	...	...	...	43,393	13	2	43,393	13	2	43,393	13	2	...	...	...	
Nimar „	...	...	...	76,802	10	3	76,802	10	3	76,802	10	3	...	...	...	
Chanda „	10,807	14	8	2,10,042	2	5	2,20,850	1	1	2,07,861	1	1	12,989	0	0	
Seoni „	2,920	10	3	73,261	7	4	76,182	1	7	75,151	6	7	1,030	11	0	
Chhindwara „	...	...	...	31,182	5	7	31,182	5	7	31,182	5	7	...	...	...	
Saugor „	...	...	...	57,660	2	4	57,660	2	4	57,660	2	4	...	...	...	
Nagpur „	936	14	5	30,682	0	2	31,618	14	7	30,610	10	7	1,008	4	0	
Wardha „	...	...	...	29,319	6	2	29,319	6	2	29,133	15	4	185	6	10	
Total ...	20,595	5	3	7,07,038	1	8	7,27,633	6	11	7,08,850	5	0	18,783	1	11	

Annual Form No. 55.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Timber and other produce brought to depot from the different Forest divisions, 1879-80

Division.	Forest.	Description of Timber, &c.,	No. of		Total of each Division.		Remarks.
			Pieces.	Cubic feet.	Pieces.	Cubic feet.	
Mandla ...	Mandla ...	Teak logs ...	5	110			
	Gwarighat ...	Do. ...	3	79			
	Do. ...	Sal logs ...	1	17			
	Banjar valley ...	Sal sleepers 10×10×10 ...	13	91			
	Do. ...	Sal sleepers	2,561	8,859			
	Kisli ...	Do. } 10×10×5 ...	51	177			
	Motinala ...	Do.	60	208			
	Gwarighat ...	Do.	87	302			
	Do. ...	Do. 6×10×12½ round.	3	18			
	Banjar valley ...	Do. 6×8×5 ...	463	682			
	Do. ...	Do. } 6×8×4½ ...	4,330	6,494			
	Mocha ...	Do.	1,258	1,887			
	Gwarighat ...	Do. 6×8×4 ...	3	4			
	Banjar valley ...	Sal scantlings ...	22	64			
	Gwarighat ...	Teak bullees ...	946	...			
	Do. ...	Bullees and mulgas ...	12	...			
	Do. ...	Sutculla pieces ...	86	...			
	Do. ...	Sal kurrees ...	2	...			
	Do. ...	Sal pieces ...	8	...			
	Do. ...	Sal sidings ...	60	...			
	Do. ...	Sal furdas ...	80	.			
	Do. ...	Miscellaneous wood ...	12	..			
	Banjar valley ...	Boats ...	14	...			
	Motinala ...	Do. ...	2	...			
	Banjar valley ...	Bambus ...	917	...			
	Jagmundal ...	Do. ...	24,278	...			
	Motinala ...	Do. ...	1,600	...			
	Barala ...	Do. ...	2,000	...			
	Gwarighat ...	Do. ...	2,367	...			
	Gwarighat ...	Firewood ..	345	...			
	Barala ...	Do. maunds ...	44	...			
					41,633	18,992	
Hoshangabad ...	Saonligarh ...	Teak charputs ...	1	...			
	Rajaborari ...	Do. ..	292	...			
	Do. ..	Teak chulias ...	4,931	...			
	Saonligarh ...	Do. ...	1,041	...			
	Do. ...	Teak sakties ...	3,558	...			
	Rajaborari ...	Do. ...	9,097	...			
	Do. ..	Teak khakers ...	5,913	...			
	Saonligarh ...	Do. ...	395	...			
	Rajaborari ...	Teak bullees ...	22	...			
	Do. ...	Teak pieces ...	4	...			
	Do. ..	Teak logs ...	17	...			
	Do. ...	Kahu sleepers ...	100	...			
	2nd Class Reserves Hoshangabad ...	Gurria sleepers ...	35	...			
	Do. ...	Sleepers of different kinds ..	2,133	...			
	1st Class Reserves Hoshangabad ...	Do.	1,498	...			
	Rajaborari ...	Firewood, cartloads ...	468	...			
					29,505	...	
Betul ...	Badnur ...	Teak logs ...	1	2			
	Bowergarh ...	Hardu logs ...	123	711			
	Do. ...	Rohun logs ...	639	3,464			
	Do. ...	Rohun sleepers ...	70	...			
					833	4,177	
Nimar ...	Punassa ...	Myals ...	2	...			
	Khandwa ...	Teak logs ...	136	...			
	Punassa ...	Teak slabs ...	100	...			
	Do. ...	Anjun sleepers ...	2,724	...			
	Indhaori ...	Do. ...	969	...			
	Khandwa ...	Do. ..	41	...			

Annual Form No. 55.—(*Prescribed.*)—Contd.

Division.	Forest.	Description of Timber, &c.,	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks.
Nimar ...	Punassa ...	Anjan slabs ...	1,403	...			
	Palri ...	Specimen sleepers ...	185	...			
	Punassa ...	Teak poles ...	3,626	...			
	Ratagarh ...	Do. ...	1,753	...			
	Ralwa ...	Do. ...	1,004	...			
	Paridhava ..	Do. ...	1	...			
	Punassa ...	Teak spokes ...	1,312	...			
	Ralwa ...	Do. ...	675	...			
	Punassa ..	Teak putties ...	381	...			
	Do. ...	Dowra axles ...	31	...			
	Do. ...	Do. pats ..	51	...			
	Do. ...	Khair poles ...	52	...			
	Do. ...	Kalias ...	12	...			
	Do. ...	Cross beams ...	7	...			
	Do. ...	Hoe piece ...	1	...			
	Do. ...	Sajur bullees ...	26	...			
	Do. ..	Teak muslis ...	234	...			
	Do. ...	Patties ...	3	...			
	Do. ...	Teak pieces ...	97	...			
	Ralwa ...	Do. ...	12	...			
	Do. ...	Teak fellies ...	207	...			
	Do. ...	Sajur bullees ..	75	...			
	Punassa ...	Temru dhooras ...	2	...			
	Do. ...	Kalam planks ..	48	...			
	Do. ...	Khair ploughs ..	12	...			
	Do. ..	Teak choolias ..	125	...			
	Do. ...	Teak charputs ..	6	...			
	Palri ...	Salai planks ...	65	...			
	Londia ...	Teak boats ...	1	..			
	Punassa ...	Temru poles ...	4	...			
	Do. ..	Fuel ...	...	82,670			
	Ralwa ...	Do. ...	...	24,325			
	Kheri ...	Do. ...	...	1,01,186			
	Khandwa ...	Do. ...	...	23,207			
	Jawar ...	Do. maunds ...	2,156	...			
	Kheri ...	Do. do. ...	639	...			
	Khandwa ...	Do. cartloads ...	768	...			
	Kheri ...	Berwood ...	...	386			
	Punassa ..	Bambus ...	2,805	...	21,751	2,31,774	
Chanda ...	Allapilli ...	Teak logs, Government ..	770	11,251			
	Rajahmundri ...	Do. ...	2,023	26,354			
	Allapilli ...	Teak logs, Zamindari ...	3,756	38,870			
	Do. ...	Saj logs, Government .	4,262	54,262			
	Do, ...	Do. Zamindari	2,136	26,634			
	Rajahmundri ...	Teak logs squared ...	181	2,628			
	Allapalli ...	Reunja logs ...	29	242			
	Do. ...	Moyen logs ...	14	105			
	Do. ...	Teak small sleepers ...	26,542	41,518			
	Do. ...	Do. for rail ...	4,742	1,292			
	Do. ...	Teak sleepers, large ...	2,286	3,808			
	Do. ...	Do. Bassola sleepers ...	9,053	11,254			
	Do. ...	Saj small sleepers ...	27,579	41,075			
	Do. ...	Do. for rail ..	6,767	1,725			
	Do. ...	Teak scantlings ...	42	30			
	Do. ..	Teak planks ...	465	947			
	Chanda ...	Beejasal scantlings ..	1	1			
	Allapilli ...	Boats ...	113	...			
	Harambaghat ...	Dougas ...	43	...			
	Donarghat ...	Do. ...	75	...			
	Warora ...	Ascooda ...	1,514	...			
	Do. ...	Bambus ...	5,786	...			
	Chanda ...	Do. ...	750	...			
	Donarghat ...	Do. ...	14,885	...	1,13,814	2,61,996	

					Balance in hand at close of the year.					
					Logs round ...	Teak ...	12,386	1,01,939		
						Sal ...	595	29,122		
					Logs squared ...	Teak ...	372	4,716		
						Sal ...	26	376		
					Logs other than teak and sal.	..	1,323	7,110		
					Scantlings ...	Teak ...	39,080	46,394		
						Sal ..	96	267		
						Other than teak and sal ...	316	173		
					Sleepers ...	Teak ...	31,002	41,533		
						Sal ...	11,640	34,483		
						Other than teak and sal ...	31,919	50,271		
					Slabs ...	Teak ...	652	2,466		
						Other than teak and sal ...	1,400	...		
					Planks	Teak ...	3,747	3,924		
					Pieces marketable..	Teak ...	3,755	10,191		
						Sal ...	468	...		
						Other than teak and sal ...	1,852	...		
					Poles ...	Teak ...	16,892	...		
						Other than teak and sal ...	11,405	...		
						Boats ...	136	...		
						Dongas ...	120	...		
						Bambus ...	1,55,483	...		
						Fuel ...	1,727	73,092		
									3,26,392	4,06,057
Total ...			7,06,191	8,37,872		Total ...			7,06,191	8,37,872

Form

FOREST DEPARTMENT,

Statement showing the revenue derived from, and expenditure incurred on, Timber

Name of Department.	Particulars of supplies.	Amount supplied.			Rate.	
					At.	per.
		Pieces	C. ft.	I. P.	Rs. a. p.	
Holkar State Railway ...	Fuel ...	...	8,747	0 0	5 0 0	100c.ft.
		...	1,77,421	0 0	5 8 0	do.
	Anjan sleepers ...	2,142	...	... ...	2 0 0	per sleeper
	Do. ...	1,499	...	... ...	2 4 0	do.
	Girria sleepers ...	30	...	... ...	... .	...
Chhattisgarh State Railway ...	Sal sleepers 6×8×4½ ..	3,658	5,495	0 0	1 12 0	sleeper
	Teak sleepers ...	21,467	32,622	7 11	3 4 0	do.
	Saj sleepers ...	3,710	4,946	7 11	1 12 0	do.
	Kahu sleepers ...	100	...	... ...	1 14 0	do.
	Jungle wood sleepers ..	3,360	...	... ...	1 12 0	do.
	Do. ...	5,652	...	... ...	1 12 0	do.
	Teak logs round ...	433	13,319	4 9	1 12 0	c. ft.
	Teak scantlings ...	24	29	9 11	1 2 0	do.
	Teak planks ...	80	357	4 10	1 2 0	do.
Department Public Works C. P.	Teak round logs ...	5	168	0 11	2 0 0	do.
	Teak furdas ...	57	303	9 3	2 0 0	do.
	Do. ...	175	724	1 6	1 12 0	do.
	Teak scantlings ...	1	1	11 2	1 4 0	do.
	Do. ...	1,005	864	10 8	1 2 0	do.
	Teak planks ...	14	11	6 5	1 2 0	do.
	Do. ...	1	0	10 1	1 4 0	do.
	Do. ..	1	0	4 11	1 0 0	do.
	Teak poles ...	1	...	... ..	30 0 0	pole.
	Lorry wheels ...	4	...	. . ...	14 1 0	each.
	Lime kanker ...	...	2,014	0 0	0 12 0	100c.ft.
Department Public Works, Punjab.	Sal logs square ...	24	514	3 7	2 10 0	c. ft.
School of Industry, Jubbulpore...	Teak scantlings ...	213	...	... ...	2 8 0	c. ft.
	Sal logs ...	1	53	6 0	1 10 0	do.
	Sal furdas ...	13	...	... ...	2 8 0	furda.
	Bambus ...	400	...	... ...	2 0 0	100
	Do. ...	2,000	...	... ...	10 0 0	1,000
Central Jail, Nagpur ...	Satin wood ...	50	...	... ...	1 12 0	each.
Central Jail, Jubbulpore ...	Sal furdas ...	20	...	... ...	2 0 0	furda.
Hoshangabad Jail ...	Teak Coolias ...	21	...	... ...	0 15 7	each.
District Police, Nagpur ...	Bambus ...	10,075	...	... ...	20 0 2	1,000
	Total ...	...	...	... ...	... ...	...

No. 59.

CENTRAL PROVINCES.

and other produce sold to public departments from Depots during 1879-80.

Amount of revenue.			Cost to Forest Department.			Comparison of revenue and expenditure.	
Due.	Received.	Outstanding.	Timber expenses under A. I.	Quota of all other expenditure chargeable against timber &c.	Total.	Surplus.	Deficit.
Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
437 5 7	437 5 7	... ...	9,844 6 7	... .	9,844 6 7	351 1 5	... .
9,758 2 5	9,758 2 5	... ...					
4,284 0 0	4,284 0 0	... ...	5,076 14 11	... ...	5,076 14 11	2,579 13 1	... .
3,372 12 0	3,372 12 0	... ...					
... .	... ...	... ...	20 2 0	... .	20 2 0	... ...	20 2 0
6,401 8 0	6,401 8 0	... ...	4,363 11 0	114 5 0	4,478 0 0	1,923 8 0	... .
79,517 12 0	79,517 12 0	... ...	42,996 8 0	5,159 8 0	48,156 0 0	31,361 12 0	... .
6,492 8 0	6,492 8 0	... ...	5,101 4 0	612 0 0	5,713 4 0	779 4 0	... .
187 8 0	187 8 0	... ...	58 13 6	77 10 0	136 7 6	51 0 6	... .
5,880 0 0	5,880 0 0	.. ..	2,610 6 9	2,975 12 0	5,586 2 9	293 13 3	... .
9,891 0 0	9,891 0 0	... ...	4,226 1 2	845 3 5	5,071 4 7	5,738 7 5	... .
23,308 15 1	23,308 15 1	... ...	14,151 7 0	1,698 2 0	15,849 9 0	7,459 6 1	... .
33 8 10	4 5 0	29 3 10	24 0 0	3 0 0	27 0 0	6 8 10	... .
402 1 4	19 8 10	382 8 6	268 8 0	32 2 6	300 10 6	101 6 10	... .
330 9 10	330 9 10	... ...	237 10 0	28 8 7	266 2 7	179 15 10	... .
607 8 8	607 8 8	... ...	360 14 11	43 5 1	404 4 0	203 4 8	... .
1,267 5 1	... .	1,267 5 1	859 9 7	103 0 0	962 9 7	304 11 6	... .
2 6 6	2 6 6	... ...	1 9 7	... ...	1 9 7	0 12 11	... .
972 15 10	972 15 10	... .	697 2 3	83 10 3	780 12 6	192 3 4	... .
12 15 7	12 15 7	... ...	8 4 0	1 0 0	9 4 0	3 11 7	... .
1 0 10	1 0 10	... ...	0 10 0	... ...	0 10 0	0 6 10	... .
0 6 7	0 6 7	... ...	0 4 0	... ...	0 4 0	0 2 7	... .
30 0 0	30 0 0	... .	1 12 0	... .	1 12 0	28 4 0	... .
56 4 0	56 4 0	... .	... .	.. ..	... ...	56 4 0	... .
15 1 8	15 1 8	... ...	... ...	... ...	... ...	15 1 8	... .
1,350 9 0	1,350 9 0	... ...	434 12 3	104 6 6	539 2 9	811 6 3	... .
436 7 4	436 7 4	... ...	... ...	... ...	... ...	436 7 4	... .
86 15 0	86 15 0	... ...	32 14 6	10 15 6	43 14 0	43 1 0	... .
26 0 0	... ...	26 0 0	... ...	... ...	... ...	26 0 0	... .
8 0 0	... .	8 0 0	4 0 0	... ...	4 0 0	4 0 0	... .
20 0 0	20 0 0	... ...	10 0 0	... ...	10 0 0	10 0 0	... .
87 8 0	87 8 0	... ...	46 4 0	1 8 0	47 12 0	39 12 0	... .
40 0 0	40 0 0	... ...	... .	... ...	... ...	40 0 0	... .
20 8 0	20 8 0	... ...	6 0 0	... ...	6 0 0	14 8 0	... .
201 11 0	201 11 0	... ...	50 6 0	2 0 0	52 6 0	149 5 0	... .
1,55,541 6 2	1,53,828 4 9	1,713 1 5	91,494 4 0	11,896 0 10	1,03,390 4 10	53,205 7 11	20 2 0

Deduct deficit ...	20 2 0
Balance for the Department ...	53,185 5 11

FOREST DEPARTMENT, CENTRAL PROVINCES.

Abstract showing the value of timber and of live and dead stock for the year 1879-80.

Description of Timber and other stock.	On hand at commencement of the year.		Received during the year.		Total.		Sold, otherwise disposed of and lost during the year, and allowance for depreciation.		On hand at close of the year.		Cause of loss and other particulars.
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
		Rs.		Rs.		Rs.		Rs.		Rs.	
Logs round ... Teak ...	10,668	64,531	6,711	59,268	17,379	1,23,799	4,993	67,327	12,386	56,472	
Logs round ... Sal ...	918	34,299	1	2,275	919	36,574	324	10,202	595	26,372	
Logs squared ... Teak ...	236	2,546	181	2,637	417	5,183	45	467	372	4,716	
Logs squared ... Sal ...	8	29	19	304	27	333	1	2	26	331	
Logs other than Teak and Sal ..	618	1,783	7,221	15,029	7,839	16,812	6,516	16,116	1,323	696	
Scantlings ... Teak ..	42,318	29,917	42	1,633	42,360	31,550	3,280	4,313	39,080	27,237	
Scantlings ... Sal ...	112	85	22	89	134	174	38	107	96	67	
Scantlings ... Other than teak and sal..	633	488	1	3	634	491	318	404	316	87	
Sleepers ... Teak ...	17,589	43,390	42,623	1,07,485	60,212	1,50,875	29,210	80,165	31,002	70,710	
Sleepers ... Sal ...	8,657	16,140	8,629	19,671	17,486	35,811	5,846	12,863	11,640	22,948	
Sleepers ... Other than teak and sal...	7,026	6,331	48,278	64,894	55,304	71,225	23,385	30,570	31,919	40,655	
Slabs ... Teak ..	1,479	5,569	100	1	1,579	5,570	927	3,154	652	2,416	
Slabs ... Sal ...	...	...	...	...	...	...	...	...	...	...	
Slabs ... Other than teak and sal...	126	170	1,471	709	1,597	879	197	179	1,400	700	
Plants ... Teak ...	5,044	4,125	465	800	5,509	4,925	1,762	2,056	3,747	2,869	
Pieces marketable ... Teak ...	3,894	6,501	19,855	6,824	23,749	13,325	19,994	7,159	3,755	6,166	
Pieces marketable ... Sal ...	196	23	624	374	820	397	352	332	468	65	
Pieces marketable ... Other than teak and sal...	1,039	148	2,133	729	3,172	877	1,320	495	1,852	382	
Poles ... Teak ...	31,131	3,533	23,245	4,302	54,376	7,835	37,484	4,034	16,892	3,801	
Poles ... Other than teak and sal...	816	96	20,476	3,933	21,292	4,029	9,887	2,779	11,405	1,250	
Boats	25	125	130	693	155	818	19	136	136	682	
Dongas	2	30	118	590	120	620	...	...	120	620	
Bambus	268,352	2,904	117,523	3,612	385,875	6,516	2,30,392	5,304	155,483	1,212	
Fuel	...	...	5,236	15,915	5,236	15,915	3,509	11,598	1,727	4,317	
Total ...	400,887	2,22,763	3,05,304	3,11,770	7,06,191	5,34,533	3,79,799	2,59,762	3,26,392	2,74,771	
Elephants	6	5,592	...	...	6	5,592	1	1,369	5	4,223	
Other live stock	209	2,696	103	2,097	312	4,793	69	1,481	243	3,312	
Machinery	...	6,195	...	25,835	...	32,030	...	619	...	31,411	
Other dead stock	...	27,324	...	3,856	...	31,180	...	3,790	...	27,390	
Total ...	215	41,807	103	31,788	318	73,595	70	7,259	248	66,336	
Grand Total ...	401,102	264,570	305,407	343,558	706,509	6,08,128	379,869	2,67,021	326,640	3,41,107	

NOTE.—Difference in value at commencement and close of the year, 76,537.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Forest buildings in the Central Provinces costing over Rs. 200 each at the close of 1879-80.

Division.	Situation.	Description of buildings.	Original cost. Of buildings on hand at commencement of the year.	Original cost. Of buildings constructed during the year.	Cost of repairs during the year.	Rent realized in 1879-80.	Remarks.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Jubbulpore ..	Khitoli ..	Rest-house, 1 room and veranda kutcha brick walls ...	400 0 0	.....	1 4 9	.....	
Hoshangabad ...	Head-quarters ...	Small pucca bungalow ...	2,094 0 0	.....	...	.....	
Nimar ...	" ..	" " ...	4,054 0 0	.....	32 6 3	* 75 1 8	* For part of the building.
" ...	Punassa ...	Pucca rest-house ..	626 0 0	.....	7 1 0	.....	
Chanda ...	Chanda Civil Station ..	Terrace roof bungalow ...	8,000 0 0	.....	203 15 10	† 484 9 6	† For portion of the building.
" ..	Moharli ..	Rest-house .	500 0 0	.....	13 12 0	.....	
" ..	Alapilli ..	" ...	300 0 0	.....	75 6 2	.....	
Seoni ..	Korai ...	Small pucca Inspection bungalow...	1,000 0 0	.....	50 8 6	.....	
Saugor ..	Garhakota ...	Pucca Inspection bungalow ...	1,000 0 0	.....	27 6 8	.....	

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REPORT

WITH THE CHIEF COMMISSIONER'S REVIEW

ON THE

Forest Administration

IN THE

CENTRAL PROVINCES,

FOR

THE YEAR 1880-81.

NAGPUR:

PRINTED AT THE CHIEF COMMISSIONER'S OFFICE PRESS.

1881.

No. 1039F., dated Fort William, the 30th November 1881.

From—A. MACKENZIE, Esq., C.S., Offg. Secretary to the Government of India, Home Department.

To—The Chief Commissioner of the Central Provinces.

I AM directed to acknowledge the receipt of your Secretary's letter No. 3338—183, dated the 8th September last, forwarding the Annual Report of Forest Administration in the Central Provinces for the year 1880-81, together with your review thereof.

Areas of reserves.

2. The area of the first class reserves remains unaltered, while that of the second class reserves has been increased by two square miles, and the totals stood, therefore, at the close of the year as follow:

	Area in square miles.
First class reserves	2,535
Second do.	16,850
Unreserved forests	281
Total forest area at the disposal of Government, the receipts from which are credited to the Forest Department	19,666

Boundaries of reserves.

3. The boundaries of the reserves are, it appears, not everywhere in such good order as could be desired. There are still a number of disputes pending in some of the first class reserves, and the Conservator remarks that the boundaries are not everywhere well defined; while several officers have omitted altogether to report on the condition of their divisions in this respect. In the case of the second class reserves much remains to be done; but there is no definite record from which the actual state of the boundaries can be ascertained. The Governor General in Council agrees with you that the effective demarcation of boundaries is the first step towards real conservancy, and he is glad to observe that you have drawn the Conservator's special attention to the matter. In order to obtain a clear idea of what is yet wanted in this respect, I am to suggest that in next year's Report it should be stated, in the case of each reserve, what part of the boundary is in good order, and what portion remains to be cleared or demarcated, the length of the boundary in each case being indicated in miles. This information may be given in the form of a short tabular statement, either for each division or for the whole province.

Forest offences.

4. The number of prosecutions for breaches of Forest rules is 904, against 1,408 in 1879-80, which shows a considerable decrease. On the other hand, the Report for 1880-81 shows that in 4,021 cases offenders were allowed to compound by a money payment, while in that for the previous year only about 3,000 compounded cases were mentioned. It has been pointed out by the Conservator that all such cases have not been reported, and it is, therefore, not easy to draw conclusions from the available data; but there can be little doubt that the total number of forest offences has increased rapidly of late years. This indicates either that offences are more numerous now than they were a few years ago, or that protection and the general efficiency of the staff have improved; and the Governor General in Council trusts that the latter may be the case.

Fire protection.

5. In the orders of the Government of India, as well as in those passed by you, on the Report for 1879-80, it was noticed that large areas, which had been protected for a number of years, had been burnt. It was pointed out that fire protection, in order to be of real

value, must be continuous, and that, before further extensions were attempted, it was necessary to make sure that the forests previously taken in hand were quite safe. During the year under review, the area taken under protection has again been increased by close on 100,000 acres. The results of the last four years' operations are exhibited in the following table:

Year.	Area in acres.		Proportion of failures to area attempted.
	Attempted.	Protected.	
1877-78	702,310	575,304	18 per cent.
1878-79	749,319	691,363	8 „
1879-80	827,470	715,773	13 „
1880-81	924,380	869,828	6 „
Average annual failures ...			11 per cent.

The season is described by the Conservator as having been favourable for fire protection; and although there has been some improvement as compared with the previous year, still large portions of two forests, which have been under protection since 1875 and 1878, have been burnt. During the last four years, on an average eleven per cent. of the area attempted has been overrun by fires annually, and at this rate every nine years an area equal to that attempted will be burnt. Such results cannot be considered satisfactory in a province where fire protection is an old established business. The facts are, however, even more unfavourable if examined in detail. The subjoined data represent the effect of fire protection on four forests, which have specially suffered during the last four years:

Name of Forest.	Year in which fire protection was commenced.	Total area attempted.	Total area burnt during the last four years.	Proportion of area burnt to area attempted in percentage of the latter.
		Acres.	Acres.	
1. Kalibheet ...	1874 ...	62,080	60,092	97
2. Banjar Valley ...	1875 ...	49,495	43,772	88
3. Bowergarh ...	1875 ...	38,720	24,320	63
4. Chandgarh ...	1878 ...	61,410	116,605	190
Total ...		211,735 *	244,789	110 per cent.

These four forests represent nearly one-fourth of the area attempted, and of their aggregate area 110 per cent. has been burnt during the last four years. Under these circumstances the Governor General in Council is of opinion that the Conservator was not justified in extending the area attempted, and I am directed to request that his attention may again be drawn to paragraph 4 of the orders of the Government of India on last year's Report. No further extension of fire protection should ordinarily be taken in hand until the existing areas under protection are made quite safe. When this has been accomplished, and new areas are brought under protection, they should be shown separately, so that it may be possible to trace the results, in the case of each block, from the time when protection commenced in it. The only effect of increasing the area attempted is to diminish the apparent amount of failure without doing any real good.

6. In paragraph 10 of the same orders it was considered satisfactory that the Conservator had found it practicable to make the first class reserves available for the requirements of the people, including the grazing of cattle. If, however, any of the reserves in which grazing is allowed are among those injured by fire, it is a matter for consideration whether they should not be strictly closed against cutting and grazing for a term of years. Such measures would make it the direct interest of the people in the vicinity to prevent the occurrence of fires. A warning that such a course would have to be followed if fires recur might have a good effect.

Cultural operations.

7. Cultural operations will prove of very little advantage until protection from fire has become certain. As noticed in paragraph 8 of your orders on the Report, it is somewhat difficult to arrive at a correct estimate of the results of the year in this respect, but on the whole it appears that the operations were only partially successful. It will be an advantage if the works of improvement are more clearly described in future Reports.

Departmental timber operations.

8. The departmental timber operations, as exhibited in Form No. 56, have resulted in the bringing to depôt of 460,539 cubic feet of timber and 104,967 cubic feet of firewood, while the sales amounted to 51,086 cubic feet of timber and 51,014 cubic feet of fuel. These figures do not include considerable quantities of other produce, which it has been found impracticable to express in cubic feet.

There is an increase in the produce brought to depôt as compared with the corresponding figures for 1879-80, but the sales have fallen off considerably. This is explained by the fact that a large quantity of material was sold before the close of the year, but not acknowledged until after the 31st March 1881, so that the transactions could not be shewn in the returns of the year.

9. The attention of the Governor General in Council has been drawn to the results of the departmental operations of the Forest Department in the Central Provinces generally, and I am directed to invite your attention to the figures given in the subjoined table, which have been extracted from the Annual Reports of the last four years:

Year.	Results of Departmental Operations.				
	Receipts Head I.	Expenditure.			Deficit.
		Head A, I.	Other charges connected with departmental operations.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1877-78 ...	65,036	52,607	18,077	70,684	...
1878-79 ...	1,28,955	74,520	13,870	88,390	...
1879-80 ...	2,00,594	1,47,680	63,256	2,10,936	...
1880-81 ...	76,157	1,39,931	25,937	1,65,868	...
Total ...	4,70,742	4,14,738	1,21,140	5,35,878	65,136

It will be observed that the transactions of the four years have resulted in a deficit of Rs. 65,136, while 214,982 cubic feet of timber, chiefly converted, 323,091 cubic feet of fuel, and considerable quantities of other produce have been removed from the sale depôts by

purchasers. In addition large quantities of timber have been shown as "lost or used (by conversion) by the Department," as will be seen from the following account taken from Form No. 56 appended to the Annual Reports:

	Cubic feet.
Balance on hand on the 1st April 1877 ...	232,452
Add received from the forests between the 1st April 1877 and the 31st March 1881	1,181,664
Total ...	1,414,116
Deduct removed by purchasers, &c., &c. ...	214,982
Balance ...	1,199,134
Deduct balance on hand on the 31st March 1881 ...	491,666
Lost, used, &c., by Department	707,468

If the figures of Form No. 56 have been correctly understood, the large quantity of 707,468 cubic feet of timber has been lost and used by the Department. Of this quantity the returns for the Allapilli Saw Mill account for 199,416 cubic feet, while over 500,000 cubic feet cannot be traced.

As an offset Form No. 60 shows, since the 1st April 1877, an increase in the value of the stock on hand of Rs. 2,10,226. Whether the stock will realize the estimated value remains to be seen: but even if this should be the case, the results of the departmental operations as a whole are not satisfactory; and I am to request that the attention of the Conservator may be drawn to the subject, with the view of the operations being conducted more economically and systematically than seems to have been the case hitherto. Should this be found impracticable, then the operations should be curtailed to meet only absolute requirements. In the latter case private enterprize will no doubt step in as soon as a genuine demand for the produce arises.

It will be an advantage if the operations are in future years more fully and clearly analysed in the summary of the Report.

Financial results.

10. The financial results of the year under review, compared with those of the previous year, are exhibited below, the division of the items between first and second class reserves being only approximately correct:

		1879-80. Rs.	1880-81. Rs.
1st class reserves ...	Receipts ...	2,84,103	1,70,272
	Charges ...	3,11,511	2,92,983
	Deficit ...	27,408	1,22,711
2nd class reserves ...	Receipts ...	7,22,620	6,79,867
	Charges ...	2,11,062	2,02,530
	Surplus ...	5,11,558	4,77,337
Total 1st and 2nd class reserves.	Receipts ...	10,06,723	8,50,139
	Charges ...	5,22,573	4,95,513
	Surplus ...	4,84,150	3,54,626

The figures for the first class reserves show a deficit of Rs. 1,22,711, which is explained by an increase of Rs. 1,52,400 in the value of timber and other forest produce in depôts. The falling off in the surplus derived from the second class reserves, amounting to Rs. 34,221, is similarly explained by the fact that a sum of Rs. 30,966 was credited in 1879-80, which had no connection with the transactions of that year.

The unsatisfactory condition of the departmental operations has doubtless caused the successive deficits of the first class reserves, and with an improvement in that direction the deficit can easily be avoided, if not converted into a surplus.

General organization.

11. In 1877 a change in the system of Forest Administration in the Central Provinces was introduced, which aimed at establishing more intimate relations between the Forest and District Administration of the country. This was effected by arranging the Forest divisions so that their boundaries coincide, as far as practicable, with those of the civil districts, and by appointing a Forest Officer to each district in which the forests are of sufficient importance to justify the expenditure. The District Forest Officer is in charge of both the first and second class reserves, and he is subordinate to the Conservator as far as the former are concerned, while he is the assistant of the District Officer as regards the second class reserves. The advantages expected from this system are that the official position and authority of the Forest Officer will be improved, and that the second class reserves will be better looked after, without relieving the District Officers of their responsibilities in regard to them. The Governor General in Council notices that the results of this important experiment have not been discussed in the Report, nor have they been touched upon in your review, and I am to request that this may be done in a prominent manner in the Report for 1881-82, when the system will have been in force for nearly five years.

12. I am also desired to invite your attention to paragraphs 6 and 11 to 14 of the orders of the Government of India on the Report for 1879-80, where the future treatment of the second class reserves was discussed. It seems to be acknowledged that the first and most important step is to select the more valuable parts of the areas, especially in the vicinity of towns, large villages, and other centres of consumption, and to treat them as first class reserves, while the remainder will yield chiefly pasture and fuel. The present Report does not show that any progress has been made in this matter since last year, and I am to request that the Conservator's earnest attention may be drawn to the subject.

A. N. .T.—Home Department Press—No. 337—1-12-81—275.

No. 3316/181

FROM

LINDSAY NEILL, ESQUIRE, C. S.,

OFFG. SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

To

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpur, the 6th September 1881.

SIR,

I am directed to make the following remarks on your Report of Forest administration for the year 1880-81.

2 Officers in all branches of the Government service had to take a share in Census operations, and officers of the Forest Department were laid under special contribution in effecting the enumeration in the wilder and more remote parts of the Province. This was unavoidable and naturally interfered to a greater or less degree with Forest work generally: numerous changes among the superior staff also operated as an obstacle to successful administration.

3. The area of the first class reserves is ... 2,535 square miles
That of the 2nd class reserves was increased
by 1,452 acres, and is now ... ... 16,850 „ „
And the area of unreserved forests is ... 281 „ „

The work done and success achieved in the 1st class reserves, which are set aside for strict conservancy, and are administered by special Forest staff, may first be considered.

1st class reserves, boundaries

4. Generally speaking, the boundaries are clearly and satisfactorily demarcated and have been maintained in good order. Proper demarcation is a first step towards the facilitation of conservancy, and officers should yearly be careful to see that the boundaries are not obliterated and the reserves encroached on. The divisions in which boundaries are not in quite a satisfactory condition are Hoshangabad, Nimar, and Chanda. On the whole, the boundaries there are in good order, but in the first named they are not everywhere sufficiently well defined. In Nimar there are some disputes which have to be adjusted, and in the Chanda division a small portion of the boundary of the Moharli reserve has yet to be cleared.

Fire protection.

5. In the matter of affording the 1st class reserves protection from fire a considerable amount of success has been achieved; and the Chief Commissioner thinks that your department is to be congratulated on the results of the year.

In the two small 1st class reserves in the Eastern division under your direct control the whole area was successfully protected. The important forests in the Mandla division were protected nearly *in toto*, only 573 acres having been burnt over by 3 fires, one of which originated from the carelessness of the Forest staff. The two reserves in the Jubbulpore division were wholly protected: in the Hoshangabad division nearly the whole of the area under protection was successfully protected: the same remark applies to the Bowergarh and Kamapur reserves in the Betul division, the latter having been entirely protected, while in the former only 960 acres were burnt over. The forests in Nimar are very valuable, and of 264,770 acres under protection 214,098 acres were successfully protected. These results are distinctly good, and they would have been better but that one-quarter of the Punasa reserve and one-half of the Chandgarh reserve were burnt over. The fires were the work of incendiaries, who are with some reason believed to have been dacoits, who set the forest on a blaze so as to cover their movements.

In the Chanda division there were a little more than 60,000 acres under protection, and over 59,000 acres successfully guarded. Three blocks were protected *in toto*; 3 fires occurred in the fourth block (Taroba), one of which is attributed to the neglect of a subordinate.

In the Seoni division, 6 blocks aggregating 140,770 acres were successfully protected; and in the Saugor division, five blocks aggregating 21,089 acres were similarly guarded. In 1879-80 the area to which protection was given was 827,470 acres, and the area actually protected 715,773, at a cost of Rs. 12,434, giving an average of Rs. 11-1-10 per square mile.

In 1880-81 the area under protection was 924,380 acres, of which 869,828 acres were successfully protected at a cost of Rs. 13,383, giving an average of Rs. 9-13-6 per square mile. These figures are entirely satisfactory.

Regarding the result of fire protection, you say, "its effect on the forest "growth is steadily becoming more and more appreciable, and it may confidently "be asserted, that in spite of all failures the advantage gained in improvement "in the condition of the forests is fully commensurate with the outlay incurred." The Chief Commissioner learns with satisfaction that in each year the work of fire protection becomes easier, owing to the larger stock of plants available for gradually suppressing grass, the most combustible element in the forest, while the heavier forest growth makes it more easy to check fires.

Prosecutions.

6. *Prosecutions* for offences or breach of Forest rules in the 1st class reserves were few. There were 28 prosecutions involving 55 persons, and convictions were obtained in regard to 23 cases and 48 persons. Besides these prosecutions many persons were allowed to compound for breaches of rules. The exact number of cases in which persons compounded is not known, as some of these cases have not been recorded, but such cases occurred in large numbers in the Nimar and Saugor divisions. The number of such offences varies not so much with the area of the forests as with their accessibility, and where first class reserves are mixed up with private forests or with cultivated lands such offences are specially numerous.

Pasturing of cattle.

7. In its orders on your report for 1879-80 the Government of India expressed its satisfaction that you had found it possible to permit the pasture of cattle on a large scale in the 1st class reserves without apparently interfering with their protection from fire. It appears that during 1880-81 more cattle were pastured in 1st class reserves in the Mandla and Nimar divisions and fewer elsewhere. The fluctuations in the total number are, however, not considerable.

Cultural operations &c.

8. In the first class reserves conservation and improvements are still the main objects in view, and the development of revenue occupies a secondary position. It is somewhat difficult to epitomize the work of the year. Cultural and improvement operations seem to have consisted in the cutting back of frost bitten trees in the Singrampur reserve in the Jubbulpore division; in cutting back badly grown teak in the Rajaborari and Saonligarh forests in the Hoshangbad division; in the thinning of teak in the Machna valley in the Betul division; in cuttings in the Punasa reserve in Nimar, which were converted into fuel for the Railway; in improvement cuttings in the Bimaram reserve in the Chanda division; in cutting back badly grown teak in the Seoni division, and frost bitten trees in the Saugor division.

Sowings were conducted on a small scale in the Hathibari and Kantera nala forests; in the Hoshangabad division the resowing of portions of plots in which the sowings of previous year had failed was accomplished. In Nimar extensive arrangements for sowing and planting in the Khandwa and Punasa reserves ended in complete failure, owing to the exceedingly late and short rainfall. In the Moharli reserve in the Chanda division some 5,000 teak were planted out, and in the Seoni division blanks on the Kurai range were filled up and teak planted out in the west Pench range. Lastly, in the Saugor division, planting and sowing were carried on in the Garhakota, Hathko and Ranipura forests, and in Ranipura bambu and sissu were planted out.

Among miscellaneous operations may be noticed the improvement of communications, to which special attention was paid in the Mandla division. With but few exceptions the 1st class reserves are only worked for annual products, dead wood, and minor produce such as bambus.

Timber operations.

9. The extraction of timber is trifling with some exceptions in the Mandla, Nimar and Chanda divisions. In the Mandla division some 684 tons of sal timber and 112 tons of other timber were extracted ; in the Punasa reserve of the Nimar division improvement cuttings yielded some 66,000 cubic feet of fuel, which were supplied to the Holkar and Scindia-Neemuch State Railway. In the Chanda division, the Bimaram forest was chiefly worked for teak, saj, poles and wood for agricultural implements. Sleepers in considerable numbers were sawn at the Allapilly Saw Mills and supplied to the Nagpur and Chhattisgarh State Railway, but the credit for these will be shown in next year's account.

The receipts and charges against the 1st class reserves are—

	Timber and other produce removed by Government agency	Other Revenues	Formation, improvement and protection of forests	Total.
	Rs.	Rs.	Rs	Rs
Receipts from ...	70,404	99,868	...	170,272
Charges against ...	162,028	37,366	93,589	292,983
Surplus ...	...	62,502	...	...
Deficit ...	91,624	...	93,589	122,711

In paragraphs 19 and 20 you explain that the deficit is nominal, and that if abnormal receipts of 1879-80 be eliminated and credit taken in 1880-81 for timber supplied to public departments which will be paid for in 1881-82, the operations of 1880-81 would show somewhat more favourably than those of the preceding year.

2nd class reserves.

10. Coming now to the 2nd class reserves it is important to remember that though they are under the management of district officers yet in all districts except Balaghat, Chhindwara, Jubbulpore, Damoh, Mandla, Raipur, Bilaspur and Sambalpur, the district officer is aided by the advice and aid of a Forest officer.

The income and charges of the 2nd class reserves for the year 1879-80 and 1880-81 are shown below :—

Districts.	Income, 1879-80.	Income, 1880-81.	Charges, 1879-80.	Charges, 1880-81
	Rs.	Rs.	Rs.	Rs.
1. Nagpur	30,611	26,324	14,105	13,343
2. Bhandara	41,078	44,618	3,644	8,229
3. Wardha	29,134	28,335	12,935	14,369
4. Balaghat	26,956	31,807	5,721	7,676
5. Chanda	69,118	71,845	10,932	11,098
6. Jubbulpore	19,769	17,059	7,374	5,450
7. Saugor	50,557	48,330	17,659	18,848
8. Damoh	43,330	52,098	11,114	11,035
9. Seoni	50,143	48,395	11,302	11,487
10. Mandla	96,157	76,433	10,297	10,468
11. Hoshangabad	47,393	42,516	18,554	16,400
12. Nimar	37,873	40,233	17,883	18,884
13. Betul	30,970	32,914	15,145	8,402
14. Chhindwara	26,661	27,415	12,601	7,851
15. Narsinghpur	9,896	12,154	3,077	3,280
16. Raipur	51,308	52,912	6,695	7,032
17. Bilaspur	14,173	13,759	2,306	2,400
18. Sambalpur	9,726	7,780	2,880	4,416

While conservation and improvement are the main objects kept in sight in the management of the 1st class reserves, the 2nd class reserves are worked with the view of providing the wood, pasture and forest produce required by the general public. The 2nd class reserves which show the largest incomes are those of the districts of Mandla, Chanda, Raipur, Damoh, Seoni and Saugor. In the case of the first two and also of Raipur the area of the 2nd class reserves is in accord with the receipts obtained, in the others the receipts do not correspond with the area of forest land. The forests of Damoh and Seoni are called on for the requirements of Jubbulpore, which has only a small amount of forests.

Boundaries.

11. It was remarked in paragraph 4 that the effective demarcation of boundaries is a first step towards the facilitation of conservancy, and in many of the 2nd class reserves demarcation is admittedly defective. The actual position of matters may briefly be noted. In the Nagpur district lines from 5 to 10 feet wide have been cleared between Government and private forests, and the work is nearly completed. It is said that in Bhandara it is by no means certain that the boundaries are correctly defined, and the Chief Commissioner is aware from papers that recently came before him that produce in the Government forests was unauthorizedly cut down and land brought under cultivation. Possession was resumed and a fine for the unauthorized clearing and cultivation exacted. In Chanda no mention is made of boundaries. It was said in the report for 1879-80, that in the Balaghat district good work had been done in the clearing of boundaries between the Government and private forests, and this seems to have resulted in the possession of some 60 square miles of forest land being restored to Government. In the Jubbulpore district the cutting of 6 feet lines along the boundaries by Malguzars under the direction of Patwaris acting under the orders of the Tahsildars has been continued, but to what extent is not reported. Regarding the districts of Saugor, Damoh and Seoni no information in respect to boundaries is given, but in regard to Mandla their existence and correctness are inferred from a passage in the district report. For the Hoshangabad district the subject is not noticed ; in Betul demarcation is not satisfactory; and in Nimar the correctness of some of the boundaries is disputed. In the Narsinghpur district it may be inferred that there has been demarcation, but several claims to proprietary rights in small areas within the reserves have been advanced and are now under consideration. In the report for 1879-80 it was said that in the Chhindwara district the boundaries of Government forests had been satisfactorily cleared with the exception of the boundaries running with the lands of some 38 villages. This view was too favourable and is now somewhat modified. Regarding the forests of the Raipur district demarcation is not referred to ; in Bilaspur the boundaries are said to be in good order ; and in Sambalpur, where Government forests are few and of small extent, 20 blocks have been demarcated, and the work is said to be approaching completion. The Chief Commissioner has noticed this subject at some length, for the work of demarcation is obviously a primary one which must precede all others. Until boundaries are defined and a line cleared or proper boundary marks erected trespass and encroachment cannot be guarded against or conservancy operations begun. It is hoped that further attention may be given to this matter and the subject receive full notice in the next annual report.

Protective measures.

12. The general protective measures are the enforcement of the law against trespassers, &c., and the prohibition of the felling of trees of the reserved kinds. These apply to all districts. In some districts more special measures are followed. Thus in the Bhandara district certain blocks of forest which are much exhausted are closed against cutting, though they are kept open for grazing, the removal of dead wood and minor produce. In Wardha the protective arrangements consist in the exclusion of fire from two reserves, and the arrangements are said to have been fairly successful. In Balaghat all the forests were successfully protected from fire during the dry season of 1880-81 and some 15 blocks are closed to all cutting. In the Jubbulpore district 17 blocks were closed to cutting. In Saugor one rather valuable block was protected from fire, some areas were protected against irregular and others closed to all cutting. Some blocks in Damoh have been closed to cutting and grazing and have been protected from fire. In the Seoni district arrange-

ments are more complete. Nearly all the forests are divided into circles, and these again into compartments, which are worked in rotation, thus giving rest and protection to a considerable portion of the forests. In Mandla if much else has not been done *dhya* cultivation has, it is hoped, been successfully checked. In Nimar the Jambupani forests which had received great damage from reckless cutting have been closed to all cutting. Similarly 18 blocks in the Chhindwara district which had been greatly drawn on for the Nagpur district have been closed for a period of 5 years. In Betul insufficient establishment is said to have prevented proper protection. The southern forests on the Berar border are still closed against the cutting of bambus.

Prosecutions.

13. Prosecutions for breaches of Forest rules in 2nd class reserves numbered 876 in which 1,715 persons were involved, and 792 cases involving 1,506 persons were convicted. The number of prosecutions is much smaller than that of the previous year. The prosecutions were for the following offences :—

7 for doing injury to the forests by fire,
669 „ unauthorized felling or appropriation of wood and minor forest produce,
44 „ grazing without permission or in tracts in which grazing is prohibited, and
156 „ other offences.

Prosecutions were most numerous in Mandla, Nimar, Raipur and Chanda; and in all the ratio of convictions to prosecutions was high, which at any rate shows that persons were not charged who had not committed an offence. In Chanda all the offences, in Raipur all the offences except one, and in Mandla all the offences but eight, related to unauthorized felling or appropriation of wood; and in regard to prosecutions in the Mandla district, which are largely in excess of those of any other district, the Commissioner of Division expresses his opinion that under the circumstances they were not too numerous. In the Nimar district, 131 of the 150 offences are classed under "other offences;" and it is not clear what the nature of such offences was.

In respect to the districts of the Chhattisgarh Division it may be remarked that the figures in Annual Form No. 48 do not agree with those furnished by the Commissioner of Division at page 46 of the report. He has, it is believed, shown among persons "prosecuted" persons who were allowed to compound by a money payment.

Revenue system in the several districts.

14. When Forest management was first undertaken, the revenue system followed was that of farming out the right to collect fees. This system was in itself bad and open to abuses, and after some time gave way to the commutation system. After trial for some time that system also fell into disrepute, and it has very generally, though not everywhere been superseded by a system of licenses having a fixed money value. Commutation had the essential defect that it was wasteful, and induced reckless and indiscriminate cutting. The actual system in force in each district may be briefly described. In the Nagpur district there is the license system, each license having a fixed money value (higher rates being levied on building woods), while the right to collect and remove minor produce is leased out. In Bhandara commutation has been abolished, except for the inhabitants of villages of not more than a hundred houses in or bordering on the forests. Such villagers enjoy this concession on the understanding that they guard the forests. In the rest of the district licenses for specific quantities are issued. The Wardha system is rather mixed. Grazing licenses on account of Government are issued; people residing in the vicinity of forests are allowed to commute for their household wants; Malguzars of such commuting villages act as vendors of licenses having a mixed money value; and departmental arrangements are made for the lease or working of certain grass lands. In the more populous parts of the Chanda district commutation is only allowed in respect to fuel and grass. Grazing is charged for separately, and the right to collect mhowa is leased out. For the removal of forest produce other than that commuted for licenses at

fixed rates for fixed quantities are issued. A commutation system is considered suitable for the wilder parts of the Balaghat district; in the more advanced the license system prevails.

Jubbulpore has a license system on a graduated scale for agriculturists and non-agriculturists. Licenses are of three kinds, periodical, special, and single; —periodical for ordinary household requirements; special, for certain quantities of specified produce; and single, to meet the wants of persons needing single head loads. In Saugor the commutation system is restricted as much as possible; it is, however, still extended to villages which have no village forests. Elsewhere licenses are issued for fixed quantities. In Damoh a restricted commutation system prevails, that is to say, only a certain amount of produce can be removed. In 1879-80 building wood was excluded. This has been so far modified that the removal of wood for agricultural implements is permitted on payment of an extra sum of 3 annas per house. In Seoni people are allowed to commute for fuel, grass and fencing wood, different rates being charged to agriculturists, non-agriculturists, and special traders, such as iron smelters. In the Mandla district there is a mixed system of special licenses and commutation, but in this district the bulk of the receipts is derived from grazing fees. In 1879-80 such fees realized over Rs. 63,000, in 1880-81 over Rs. 51,000.

In the Nerbudda Division the system of management is the same for all districts. There are four kinds of licenses,—a general, a special, a monthly, and grazing licenses. The general license is supposed to cover the ordinary wants of agriculturists, the special license to meet particular wants, and the monthly license to cover head loads of grass or fuel taken for sale to bazaars and markets.

In the Chhattisgarh Division the arrangements during the year were: in the Raipur district annual licenses for specified quantities, in Bilaspur fixed money value licenses, and in Sambalpur there is a mixed system of special license for fixed quantities or commutation for yearly requirements.

On the whole, the best system seems one of removal of produce under licenses, and to this arrangements are generally tending. Naturally such a system is more distasteful to the people than one of commutation, but the wasteful procedure of the people has made it necessary that they should pay more for the same quantity of produce and that a smaller area of forest should be open for cutting.

Pasturing and general yield in 2nd class reserves.

15. The number of cattle pastured in the 2nd class reserves was very large, and the character and distribution of the rain-fall caused increased number to be driven to some of the forests for grazing. The produce removed from the forests consisted chiefly of bambus, firewood, grass, and a small amount of timber for domestic and agricultural purposes. You have in paragraphs 137 to 264 of your report explained the fluctuations in receipts and income, and further reference to them here does not seem needed. Before closing his remarks on the unreserved forests the Chief Commissioner desires to notice paragraph 158, in which you say that the Commissioner of the Nerbudda Division has suggested the expediency of encouraging squatter cultivation in the reserves. The Chief Commissioner is not aware of the exact circumstances which may perhaps warrant such a suggestion, but as a general measure he is convinced that the entire cessation of squatter cultivation is desirable. There is plenty of other land available, and squatting in the forests only leads to waste and destruction of valuable timber and to the squatters emigrating after a short stay to other settlements.

The receipts from and charges against the 2nd class reserves are:—

		Timber and other produce.	Other Revenue.	Forest improvement.
Receipts from	... Rs.	5,754	6,74,113	...
Charges against	... „	3,840	1,65,943	32,747
Surplus	... „	1,914	5,08,170	...
Deficit	... „	...	...	32,747
Total	... „	4,77,337	...	...

The receipts stand therefore about the same as in the preceding year.

16. On the small Telinkheri estate belonging to the Forest department a series of experiments was undertaken with the view of watching growth of various species under different conditions. The formation of such small gardens for experimental observations seems judicious.

17. On a review of your report as a whole the Chief Commissioner is inclined to think that in the 1st class reserves one satisfactory feature of the year is that fire conservancy proved so successful. The rain-fall of the year was favourable for such conservancy, but the department also deserves credit for the quick suppression of such fires as did occur. The gradual restocking of the forests seems also progressing favourably. Artificial sowing and planting to fill up blanks and improve the composition of the forests and improvement cuttings to secure reproduction of the better species from the stool, and to give place to the young growth of better species, have also met with a fair measure of success. In the 2nd class reserves, the weak point is the absence of proper boundaries, and the as yet almost entire absence of scientific treatment for fire protection, planting and sowing have only been conducted on a very limited scale. Many of the forests have not even yet been inspected by a trained Forest officer, and especially is this the case with the forests of Raipur and Bilaspur, in many of which reckless cutting is believed to take place. The Chief Commissioner is aware that there are many demands on the staff of Provincial Forest officers, but it is of very great importance that the forests in the Chhattisgarh Division should be examined before they are denuded to such an extent that their being brought under management is synonymous with their being closed to all operations, and the Chief Commissioner therefore looks to you for prompt and early action in this matter.

18. The Chief Commissioner is glad to acknowledge the services of Messrs. Thompson and Whittall and Captain Losack, Deputy Conservators; of Messrs. Foster and Hooper, Assistant Conservators; of Mr. G. F. Taylor, Sub-Assistant Conservator; and of the Forest Rangers named in paragraphs 283 and 284 of your report. The Chief Commissioner also desires me to thank you for the zeal with which you manage your department, and for your services in promoting its efficiency.

Your report includes operations ending on the 30th June, and there is some unavoidable delay in obtaining the verification of the prescribed forms by the Assistant Comptroller General of Forests. The report should reach the Government of India by the 1st September. To enable the Chief Commissioner to submit it by that date it is essential that the report should be submitted by you on the 15th August, and the Chief Commissioner must express his hope that you will strive to be strictly punctual in future, for the present report will reach the Government of India a week or ten days after the prescribed date.

I have the honor to be,

Sir,

Your most obedient Servant,

LINDSAY NEILL,

Offg. Secretary.

No. B-93.

FROM

MAJOR J. C. DOVETON,

CONSERVATOR OF FORESTS,

Central Provinces.

TO

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpur, the 22nd August 1881.

SIR,

I have the honor herewith to forward the Report on Forest administration for the past year together with the prescribed Annual Statements.

I have the honor to be,

Sir,

Your most obedient Servant,

J. C. DOVETON,

Conservator of Forests,

Central Provinces.

CHAPTER I.

Summary of administration for 1880-81.

1. It is necessary to preface the summary of the year's administration by a brief reference to the strength of the superior staff, changes in control charges, and the exceptional Census work that devolved on Forest officials.

2. Notwithstanding the comparatively large number of officers that stood posted to the Provinces the strength of the superior staff available was on the whole deficient. During the early part of the year the control of two divisions rested with a Forest ranger. Later on, more officers were available, but transfers from and to the Provinces necessitated many changes, and three divisions only remained in charge of the same officers throughout the year. Three officers were granted privilege leave, but from this cause only one transfer of divisional charge took place. It may here be noted that at the commencement of the year every officer present was according to the records of this office eligible for privilege leave or furlough.

3. In the heart of the working season Census operations were started, and the Forest establishment was called upon to accept a share in this important undertaking. Almost everywhere this work occupied an important portion of the time of upper subordinates, and in some cases of gazetted officers also, at a time when their forest duties demanded most earnest and constant attention. That this demand on the Forest department was unavoidable is readily admitted, but it nevertheless caused a heavy strain at a time when the department was least able to bear it, resulted in greater or less neglect of forest work, and caused arrears which had subsequently to be worked off.

4. During the year under report the area of the 1st class reserves underwent no change. The recorded area of the 2nd class reserves was increased by 1,452 acres, 9,085 acres having been alienated and ceased to form part of the reserved forests, while 5,105 acres the right in which reverted to Government were duly declared reserved forests, 5,432 acres were added to correct a previous error in record. To unreserved forests have been added 35,721 acres proprietorship in which has reverted to Government. Details of these charges are given in Forms 45, 45A, and 45B.

5. The area of the Government forests at the close of 1880-81 was 1,25,87,037 acres as detailed below:—

			Acres.
1st class reserves	...	...	16,22,454
2nd class reserves	...	...	1,07,84,443
Unreserved forests	...	...	1,80,140
	Total	...	1,25,87,037

6. The boundaries of the 1st class reserves are carefully maintained, and are for the most part in good order, though, as recorded in Chapter II, there are places where the correctness of the boundaries is disputed. To the maintenance of boundaries in the 2nd class reserves attention has been given, and efforts are being made to bring them into good order. From the reports of District and Forest officers, however, there is reason to fear that the boundaries have in many cases been encroached upon by the owners of adjoining private estates.

7. So far as prevention of the unauthorized use of the forests is concerned the watch and guard of the 1st class reserves has been fairly good, though, as will be seen hereafter, there have been cases in which as an agency for preventing injury to the forests the establishment has proved insufficient. In the 2nd class reserves and unreserved forests there is reason to believe that protection has on the whole been as complete as practicable with the agency available.

8. According to the returns submitted to this office the total number of offences against forest law was 5,572, in which 12,688 persons were involved, but the Betul, Seoni, Bhandara, Damoh, Narsinghpur and Bilaspur divisions return only cases in which prosecution was resorted to, and it is improbable that in these districts there were no other offences. Of the cases above noted, only 904 involving 1,770 persons were prosecuted, the result being that in 815 cases 1,554 persons were convicted. As will be seen on reference to Form 48, the largest number of prosecutions was in Mandla, where more stringent measures were considered necessary to enforce compliance with forest rules. To admit of comparison the prosecutions and convictions for the past two years are given below :—

Year.	Prosecutions.		Convictions.		Percentage of convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1879-80 ...	1,408	2,718	1,302	2,484	92·5	91·4
1880-81 ...	904	1,770	815	1,554	90·2	87·8

The number of cases in the past year was fewer than in 1879-80, but the percentage of convictions was a little less favorable.

9. From Form 47 it will be seen that of 9,24,380 acres the protection of which from fire was attempted 8,69,828 acres were successfully protected at a cost of Rs. 13,383, giving an average of a little under 3 pies per acre or Rs. 9-13-6 per square mile. As stated in the remarks on each division, several fires occurred in the areas under protection, but with two exceptions, viz. the fires in Punasa and Chandgarh, they were suppressed within narrow limits, and it must be admitted that in this section of forest work the establishment is steadily becoming more efficient. During the past year in very few cases could it be said that the occurrence or spread of fire was due to neglect on the part of the establishment.

10. Regarding the result of fire protection there is nothing new to record. Its effect on the forest growth is steadily becoming more and more appreciable, and it may confidently be asserted that in spite of all failures the advantage gained in improvement in the condition of the forests is fully commensurate with the outlay incurred.

11. It must be admitted that every year of protection adds to the stock of plants available for gradually suppressing grass, the most combustible element in the forests, while the heavier the forest growth the more easy it becomes to check forest fires. The great danger hitherto has resulted from the openness of the forests, whereby the extinction of fires is rendered difficult, first by the production of combustible matter in the form of grass, and secondly, by the free access of wind thus admitted. It may be said that improvement in the forest growth will result in the production of dead wood, which may prove another source of danger from the excessive heat it would give off in burning, but except perhaps in the case of bambu forest, the accumulation of dead wood can have no appreciable effect till conditions of forest growth have been established that will justify considerably heavier expenditure on protection.

12. As recorded in detail in Chapter II, improvement cuttings were carried out on a small scale in the Hoshangabad, Nimar, Seoni, Saugor, and Chanda divisions. In the reserves of Rajaborari, Saonligarh, Punasa, Garhakota, Ranipura and the Kurai range, they had as their chief object the reproduction from the stool of a better crop, while in Ahiri the cuttings were to aid the development of young teak already established. The result of these cuttings must form the subject of record hereafter, but it may be noted that the regrowth from cuttings made before the rains of 1880 in Nimar and Hoshangabad is good.

13. Regarding the cuttings of previous years, it may be said that in Ahiri the growth of young teak has been materially benefited. As recorded in the previous year's report the re-growth in other divisions from cuttings of previous years suffered from the severe frosts of 1878-79 and 1879-80, nevertheless the result of these cuttings has been the production of a crop which promises to prove infinitely superior to that removed.

14. During the year under report sowing and planting on a large scale to complete the crop in the forests was attempted in the Nimar division only, but here the work done has proved a failure, mainly attributable to the failure of the rainfall, which could not be foreseen. In the Wardha division bambu sowings proved a failure from the same cause. In the Saugor division the planting and sowing of bambu was carried out on a moderate scale, so far as can at present be judged, with good results. A small quantity of sissu planted out in Ranipura succeeded well. In Pandratola a small "tun" plantation was formed, and is reported as successful. In the Nagulwari valley in the West Pench range, a number of teak were planted out and promise to succeed. In the Kurai range some sowings in ploughed lines were made and some teak was planted out, but the result is as yet uncertain. Elsewhere such operations were on an extremely small scale.

15. In the arrangements for working the 1st class reserves there have been no changes worthy of special note. It may still be said while the development of the revenue has been aimed at, the improvement of these forests has been the main object kept in view. In the 2nd class reserves attention has been devoted more to the development of revenue, though with some exceptions the protection of the forests has not been lost sight of, while in some cases measures for improvement have been adopted.

16. Details of the timber brought on stock and disposed of are given in Forms 55, 56. The principal operations were in the Chanda, Mandla, and Nimar divisions, and have been fully detailed in Chapter II.

17. The yield of the forests has, where practicable, been given in the report on each division. There is still a large quantity of produce removed, of which a detailed account is not forthcoming.

18. The following is a comparative statement of the receipts and charges for the past two years :—

		1879-80.		1880-81.
Receipts	... Rs.	10,06,723		8,50,139
Charges	A.—3,58,380		3,40,386	
	B.—1,64,193		1,55,127	
		5,22,573		4,95,513
Surplus	... Rs.	4,84,150		3,54,626

19. As explained in the report for 1879-80, however, in the receipts shown against that year is included a recovery on account of previous years amounting to Rs. 30,000, while at the close of 1880-81 there was due to the department Rs. 1,25,600 on account of material supplied to public departments, but which does not appear as outstanding owing to the debt not being acknowledged till after the close of the year. In the booked outstandings, however, there is a difference against the year under report of Rs. 2,570. To obtain therefore the value of each year's transactions Rs. 30,000 must be deducted from the receipts of 1879-80, while to the realizations of 1880-81 must be added Rs. 1,25,600—Rs 2,570. The value of the transactions in each year stands thus—

1879-80	... ... Rs.	9,76,723
1880-81	... ... ,,	9,73,169
	Difference Rs.	3,554 less in 1880-81.

20. It appears, however, that in the Mandla division there were in 1879-80 large realizations on account of the previous year which had not appeared in the Provincial accounts as outstanding at the commencement of that year. These outstandings amounted to Rs. 17,020, the receipts on account of 1880-81 therefore exceeded those of the previous year by about Rs. 13,500.

21. The receipts from minor produce have materially increased, while those under timber brought to depot by Government agency are less by Rs. 1,15,937, those from grazing and fodder grass by Rs. 28,898, and miscellaneous receipts by Rs. 37,335. Under other heads there have been fluctuations which are unimportant. The increase in minor produce receipts is satisfactory, seeing that the value of mohwa has fallen so materially. It is attributable to better arrangements for the disposal of such produce. The smaller realizations under the head of timber are fully accounted for by the outstanding of Rs. 1,25,600 already referred to. The smaller realizations from grazing and grass may result partly from the additional duties in Census work which devolved on the Forest establishment, but it has already been partly accounted for by the inclusion in the receipts for 1879-80 of a large outstanding in Mandla. The demand for grazing and grass was, however, materially influenced by the rain-fall and its distribution, and in some cases by the prevalence of cattle disease. In Nimar a short and ill distributed rain-fall had the effect of increasing the demand for grazing and grass. A well distributed rain-fall resulted in a decrease in other districts except Damoh, where better watch and guard brought in a larger income; and Chhindwara from which district it is believed fewer cattle went to the uplands. Cattle disease has probably prevented cattle being taken to the Government forests to graze, to the same extent as usual.

22. The decrease under "Miscellaneous" receipts is not fully accounted for, but is partly due to the fact that in some districts receipts from squatter cultivation were in previous years credited to "Forests," while of receipts hitherto credited to Head V*c*, "Miscellaneous, forest Revenue" Rs. 10,192 appear in the past year under Head IV*b*. Allowing for the difference on account of outstanding and receipts from squatter cultivation not appearing under "Forests," the receipts on account of 1880-81 have as a whole been much higher than those on account of 1879-80.

23. The expenditure has been less, owing to the smaller amount drawn by officers of the superior establishment on account of pay and travelling allowance, and to the smaller amount of fuel delivered to the Holkar and Scindia Neemuch State Railway.

24. The net result of the year's transactions has, as already explained, been more favorable than shown by the actual receipts by nearly 1½ lakh of rupees.

25. Form 52A. gives the receipts under two main heads and the expenditure under three main-heads as required by the Government of India. The following is an abstract of this form:—

		Timber and other produce removed from forests by Government agency.	Other revenues.	Formation, improvement and protection of forests.	Total.
		Rs.	Rs.	Rs.	Rs.
1st Class Reserves.	Receipts from	70,404	99,868	...	1,70,272
	Charges against	1,62,028	37,366	93,589	2,92,983
	Surplus	...	62,502	...	...
	Deficit	91,624	...	93,589	1,22,711
2nd Class Reserves.	Receipts from	5,754	6,74,113	...	6,79,867
	Charges against	3,840	1,65,943	32,747	2,02,530
	Surplus	1,914	5,08,170	...	4,77,337
	Deficit	...	...	32,747	..
Totals 1st and 2nd Class Reserves.	Receipts from	76,158	7,73,981	...	8,50,139
	Charges against	1,65,868	2,03,309	1,26,336	4,95,513
	Surplus	..	5,70,672	...	3,54,626
	Deficit	89,710	...	1,26,336	...

Form 52B. shows the amount under each Budget head of expenditure debitable to the three heads above given.

26. In the apportionment of charges not directly debitable to each head there is no pretension to perfect accuracy. Nevertheless such charges have been carefully divided with due regard to the varied conditions existing in different forests and different divisions. When, as in the 2nd class reserves, establishment employed for the collection of revenue is the only agency by which protection of the forests is secured, it appears reasonable that part of its cost should be debited to conservation, but as the cost of such establishment comes under Budget Head A II, the whole amount has, in accordance with Circular No. 23F, of 30th December 1880, been debited against revenue.

CHAPTER II.

1st CLASS RESERVES.

DIRECTION DIVISION.

27. As no officer of the superior staff has yet been available for the Eastern forests the two small reserves of Hathibari and Kantera-nala have continued under the direct control of the Conservator.

Area and boundaries.

28. In the area or boundaries of these reserves there has been no change. The boundaries are annually cleared and maintained in the course of fire protection.

Protection and improvement.

29 Surrounded as these two reserves are by other forests, the temptation to commit offences in them is small. No offences were reported.

30. Both reserves were successfully protected from fire. The cost of protection is given below :—

Range	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Hathibari	2,123	2,123	88	8	0	26	10	8	8·000
Kantera-nala	2,366	2,366	106	2	10	28	11	6	8·616
Total ...	4,489	4,489	194	10	10	27	12	0	
Average for the Division ...						27	12	0	8·326

31. With the exception of small sowings made by the establishment without special expenditure which call for no special remark, no other work of improvement has been attempted.

Financial results.

32. The lac crops of the past year failed, and the receipts of the two reserves only amounted to Rs. 87. The expenditure amounted to Rs. 1,038 exclusive of Direction charges. The charges per square mile are high, owing to the smallness of the area.

MANDLA DIVISION.

Area and boundaries.

Area.

33. No new reserves have been formed, and there has been no alteration in the area of those existing at the commencement of the year.

Boundaries.

34. The boundaries and boundary pillars of all the reserves have been carefully maintained and are reported as being in good order.

Protection and improvement.

Breach of Forest rules.

35. Protection against unauthorized use of the forests has been tolerably complete. There were 5 prosecutions for breach of Forest rules involving 18 persons. Of the persons prosecuted none were acquitted. In 4 other cases the 4 persons concerned were allowed to compound. The offences above specified were in the reserves on the Phen river; in the other reserves where the establishment is stronger, there were no offences.

Protection from fire.

36. There was no addition to the area under special protection from fire. The following statement shows the area protected, and the cost of protection.

Range.	Area in acres.		Cost of area actually protected.						
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	A.	P.	Rs.	A.	P.	Pies.
Banjar valley	49,495	49,045	655	14	5	8	8	11	2·568
Motinala	1,659	1,659	48	14	10	18	13	11	5·662
Jagmundal	24,503	24,383	413	7	8	10	13	10	3·260
Chuharigogarh	1,661	1,661	68	14	11	26	8	11	7·968
Barola	7,153	7,153	120	3	4	10	12	1	3·227
Ahiri	2,150	2,147	20	5	0	6	0	10	1·816
Total ..	86,621	86,048	1,327	12	2				
Average for Division ...						9	14	0	2·963

37. In the forests under protection 3 fires occurred, of which one in Ahiri was extinquished before it spread over more than three acres, one covering 120 acres in Jagmundal occurred early in the season before the full establishment of fireguards had been entertained. The third fire which covered 450 acres in the Banjar has been traced to neglect on the part of subordinates, who have been duly punished. The result of the year's work under this head is satisfactory, but it must be admitted that though line burning was rendered difficult by late rains the season has on the whole been favorable for fire protection.

38. The forests under protection from fire have also been closed against grazing, but permission has now been given to open the large blanks in the Banjar forest for grazing purposes.

9. In the previous year's report reference was made to the injury done by frost to the small experimental plantation of tun, sevun, and hurra in the Banjar forest. During the past year, frost was less severe, and notwithstanding previous injury a fair proportion of the plants have survived. A few teak put out in the rains of 1880 by the forester in charge have come on well.

Should the plants continue to thrive as they have done up to date, the cultivation of this species will be undertaken where the soil and elevation admit.

40. In the Jagmundal reserve the cutting of creepers has been extended, but the Divisional officer has not yet returned the area cleared.

41. With the exception above noted the work of forest improvement has been confined to fire protection which on a large scale gives the best results.

Improved communication.

42. The improvement of the system of communication whereby the cost of working the Banjar and other forests will be rendered more profitable has been continued.

43. At the Promadhar in the Nerbudda between Mandla and Shezdara the channel through which timber has to be taken, has been improved by widening the passage and shutting off a heavy side current by the construction of a masonry wall. The actual amount of work in this undertaking is represented by the blasting and removal of 12,800 cubic feet of rock, rock excavation for foundations 769 cubic feet and 3,724 cubic feet of masonry. The foundation having to be set in rocks ordinarily under water the work was necessarily costly. The total cost has been Rs. 2,579-3-2, of which Rs. 654-4-9 appear in the current year's accounts. Plans and estimates have also been drawn up for 3,000 feet of tramway to take produce from above to below the Shezdara falls, and this season plans and estimates for improving the passage between Shezdara and Sakri will, it is hoped, be completed.

44. During the rains of 1880 there were several landslips on the Khanaghat in the Banjar forest, which considerably enhanced the cost of repairs. The road was, however, put in good order at a cost of Rs. 208, and catch drains are now being run to prevent the recurrence of landslips and consequent blocking up of the side drains.

Valuation survey.

45. A valuation survey of the Banjar Valley forest was completed during the year. This survey only took in 1,023·2 acres or a little over 2 per cent of the whole area, but the survey lines have been so run that at any time additional data, if necessary, can be obtained by running other lines between those already surveyed. The survey lines were carefully laid and should therefore give fairly reliable data. In this survey sal only, for which alone the forest is likely for some time to be worked up to its capability, has been taken into account. The actual result of the survey is given below—

Sal trees, 1st class, 6 feet and upwards ...	9,427
Sal trees, 2nd class, 4 feet 6 inches and upwards ...	17,747
Sal trees, 3rd class, 3 feet and upwards ...	1,27,564
Sal trees, 4th class, 1 foot 6 inches and upwards ...	4,47,134
Sal saplings ...	2,65,288

It is hoped that some definite information regarding the rate of growth will shortly be available, and then with a knowledge of what may safely be cut, the department will be in a position to negotiate for the disposal of the annual yield. The method of working will be simple, *viz.* selection fellings within limited areas to be worked in rotation with due regard to the regeneration of the forests.

Yield and Working.

46. The forests have only been worked for minor produce, bambus and dead timber, and the following statement gives the outturn in produce :—

			Estimated weight in tons.
Sal timber	...	...	684·76
Teak timber	...	...	27·14
Saj wood	...	...	0·60
Wood of other kinds	...	...	58·92
Firewood	...	...	25·17
Bambus	...	...	154·26
Tekur, hurra and mohwa	...	...	8·80
Honey	...	...	0·67

47. Grazing was furnished for the following livestock :—

Buffaloes	1,151
Cows	6,023
Goats	25

48. With the exception of fuel and small wood the yield of the forests was collected on account of Government, but owing to the failure of the hurra crop the quantity of minor produce thus collected was small.

49. Timber operations were conducted on a moderate scale, the produce extracted being from the Banjar forest. The principal work accomplished is detailed below :—

	Prices.	Cubic feet.	Cost. Rs.	a.	p.
Sawing scantlings ...	6,498	15,335	2,497	12	2
Carting logs and scantlings from forest to Mocha ...	6,764	16,569	4,188	15	0
Carting scantlings from forest to Cheesgaon ...	1,636	2,454	1,384	14	2
Floating logs and scantlings from Mocha to Mandla ...	5,337	18,527	1,459	5	11
Floating scantlings from Mandla to Burridhar ...	4,908	17,991	1,638	6	6
Floating scantlings from Burridhar to Gwarighat ...	4,818	13,310	1,413	8	4

50. Though the total of the expenditure as shown above is correct, it is feared that there has been some mistake in the apportionment of some of the charges which cannot at present be corrected. Comparison of costs with those of the previous year would therefore be unprofitable. It is certain, however, that local owners of carriage have been induced to take up timber transport when they and their cattle are not otherwise employed, and it is hoped that by giving facilities for the construction of carts the supply of local private carriage will be gradually increased.

51. Heavy timber was also taken through the Premadhar, with difficulty it is true, but it was considered necessary to make sure that this passage was practicable before incurring expenditure on its improvement.

Financial results.

52. The receipts and charges against the different reserves are shown in the following statement :—

Forest.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Banjar Valley ...	33,669	2	5	22,433	15	5	11,235	3	0	...	...	...
Topla	778	2	3	2,410	1	11	...	...	...	1,631	15	8
Keolikhapa	179	12	9	1,631	15	11	...	...	...	1,452	3	2
Motinala	81	4	0	936	9	10	...	...	...	855	5	10
North Phen... ...	195	13	0	1,628	14	6	...	...	...	1,433	1	6
South Phen	314	14	0	2,414	11	8	...	...	...	2,099	13	8
Jagmundal	228	7	2	2,875	10	3	...	...	...	2,647	3	1
Chuharigogarh ...	1,719	5	6	995	5	9	723	15	9	...	...	...
Ahiri ...	...	...	...	879	5	5	...	...	...	879	5	5
Barela ...	147	12	9	1,915	15	0	...	...	...	1,768	2	3
Total ...	37,314	9	10	38,122	9	8	...	...	...	807	15	10

The surplus against Chuharigogarh is casual, resulting from the sale of some dead teak timber extracted from that forest. The surplus against the Banjar Valley

forest is satisfactory. With the exception perhaps of Barela the other reserves are not yet expected to pay, nor with the exception of Jagmundal and Chuharigogarh can they be expected to do so until by degrees the department is able to establish greater facilities than at present exist for the removal of the produce.

53. With a view to develope revenue from the Barela reserve, it is now proposed to lay out a few good roads connecting this forest with the open country in Jubbulpore whereby the forest may be worked for bambus, fuel and grass and perhaps a small quantity of building wood.

JUBBULPORE DIVISION.

Area and boundaries.

Area.

54. The area of the 1st class reserves is unchanged. The transfer of the Lower Gour forest from the 2nd to the 1st class reserves, owing to changes of officers, was deferred till the current season.

Boundaries.

55. The boundaries of the Bijeragogarh and Singrampur reserves are reported as in good order.

Protection and improvement.

Breach of Forest rules.

56. Only 6 cases of infringement of Forest rules were reported. In these 6 cases the 10 persons concerned were prosecuted, with the result that in 5 cases 9 persons were convicted.

Protection from fire.

57. Both the reserves have been successfully protected from fire up to the rains of 1881. The total charges on this account against each forest and the average cost are given in the following statement :—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Biejragogarh ...	21,188	21,188	400	9	4	12	1	7	3·630
Singrampur ...	6,555	6,555	93	12	4	9	2	6	2·747
Total ...	27,743	27,743	494	5	8				
Average for the Division ...						11	6	5	3·421

58. The only other work of improvement was the cutting back of frost bitten trees in Singrampur.

Yield and working.

59. Bijeragogarh is still but slightly drawn upon, a small quantity of dead wood, a few bambus, and some grass and other minor produce being the only material removed. A better out-turn has however been obtained from Singrampur, and it may be expected to increase, though a large yield cannot yet be expected. Cutting in the latter reserve has been confined to bambus and injured or ill-shapen trees.

60. The following statement shows the yield of the forests:—

				Number.
Teak poles	...	...	...	2,347
Poles other kinds	...	...	...	19
Rejected logs	...	...	...	17
Bambus	...	...	...	8,682
Grass	...	...	pulas	24,044
Hurra and mohwa		...	pulas	50

Financial results.

61. The following statement shows the receipts and charges of the year:—

Range.			Receipts.			Charges.			Deficit.		
			Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Bijeragogarh	...	...	219	0	10	2,946	12	2	2,727	11	4
Singrampur	...	...	925	15	4	2,168	6	0	1,242	6	8
	Total	...	1,145	0	2	5,115	2	2	3,970	2	0

The charges are somewhat higher than in the previous year, owing partly to the amount of control charges apportionable to these forests having been larger. In both the reserves the income is higher, and though it may fluctuate it is expected to increase slowly but steadily.

HOSHANGABAD DIVISION.

Area and boundaries.

Area and boundaries.

62. The area of the reserves remains the same. Several portions of the boundaries were seen by the Conservator and found in good order, but it is reported that they are not everywhere so well defined.

Protection and improvement.

Watch and guard of the forests.

63. The watch and guard of the forests is fairly good, though within no distant period increased demand will probably necessitate a somewhat stronger establishment. Forty-two cases of breach of Forest rules were reported. In 5 cases 5 persons were prosecuted, and the conviction of 3 persons in 3 cases obtained. In 37 other cases the 38 offenders were allowed to compound.

Protection from fire.

64. The area under protection from fire has been very slightly extended. The work done and its cost are given in the following statement :—

Range.			Area in acres.		Cost of area actually protected.								
			Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
					Rs.	a.	p.	Rs.	a.	p.	Pies.
Bori	...	...	39,680	39,680	723	4	10	11	4	0	3·500
Rajaborari	...	...	102,720	102,640	509	1	3	3	2	0	0·952
Saonligarh	...	...	78,080	78,080	312	5	7	2	8	0	0·768
	Total	...	220,480	220,400	1,544	11	8				
			Average for the Division					4	7	9	1·346

That the cost per square mile has been less, must be regarded as accidental. In the latter part of March rain fell freely, and the 1st April saw the production of a crop of green grass 5 to 12 inches high. The saving thus caused in protection was, however, partly counterbalanced by the necessity of subsequently re-clearing the fire lines.

Grazing.

65. The Bori forest was closed against grazing, except for the small number of cattle belonging to the people of Dhain, a forest village in the heart of the reserve. In the other areas under protection, cattle were permitted to graze, except in those portions in which during the past 5 years regular cuttings and sowings had been made.

Improvement cuttings.

66. The cutting over of badly grown teak was continued.

The following is a copy of the return rendered of trees felled and teak left standing:—

Range.	Block.	Locality.	Area in acres.	Teak trees cut over	Teak trees reserved	
					For seed only.	As promising trees.
Rajaborari ...	Ajnal ...	Jamunia ...	83	3,485	335	3,460
	Gunjal ..	Pania Mhow ...	6	318	32	330
Saonligarh ...	Dhekna ...	Nonia ..	325	3,485	3,200	5,625
		Total ...	414	7,288	3,567	9,415

Unfortunately changes in establishment interfered with more extensive cuttings of this kind including other species.

The re-growth from the cuttings of previous years continues to show a marked improvement on the crop removed.

Planting and sowing to fill up blanks.

67. With the exception of putting out a few sissu experimentally on the Sonebadra, the only work under this head was the re-sowing of portions of plots in which the sowings of previous years had failed. There can be no doubt that these cheap sowings have resulted in the production of a large number of plants that would not otherwise have been obtained, but I now incline to the opinion, that high cultivation will, with proper arrangements, prove the most satisfactory.

Yield and working.

68. With the view of ultimately introducing a regular system of cuttings for wood of all kinds, the more accessible portions of Saonligarh and Rajaborari are gradually being closed against cutting, except by Government agency. In the remaining portions of these forests, the demand on different products is regulated by rates varying according to the actual value of the produce. With the exception of grass and a little minor produce that it was not possible thus to dispose of, the right to collect minor produce within limited areas was leased, inhabitants of the forests being, however, permitted to commute for their own wants. The Bori forest was closed against all cuttings.

69. The only departmental timber operations were the felling and collecting of a few bambus, and the collection on forest roads of wood resulting from the improvement cuttings already referred to.

70. The following statement shows the yield of the forests in the more important products, and the number of cattle grazed :—

	No.	Cart load.		Joti load.	Head load.
		2 bullocks.	4 bullocks.		
Teak poles and pieces	35,637	...	...	...	...
Tinnus poles	1,153	214	14	6	...
Logs of other kinds	1,014	99	1	1	...
Wood for building and agricultural purposes	2,948	35	15	137	630
Firewood	...	1,534	103	...	2,633
Bambus	286,162	...	...	...	450
Bambu mats, &c.	...	...	...	...	1,891
Grass	...	456	13	...	1,885

Grazing.

Buffaloes	...	6,360
Cows and bullocks	...	32,510
Sheep and goats	...	308

The number of cattle grazed was a little smaller, and the quantity of grass removed was less, but this may be attributed to accidental causes in connection with the distribution of the rainfall. The smaller quantity of fuel removed appears to be due to there having been no departmental cuttings for fuel. It appears to indicate that the value of time is more appreciated. The difference under other heads calls for no special explanation.

To facilitate the extraction of produce, the construction of three good roads is proposed, and will duly be put in hand as funds become available.

Financial results.

71. The receipts and charges were as follows :—

Range.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a.	p.	Rs.	a	p.	Rs.	a.	p.	Rs.	a.	p.
Bori ...	308	0	10	2,329	6	4	...	...	...	2,021	5	6
Rajaborari ...	15,679	8	0	6,218	11	9	9,460	12	3	...	...	...
Saonligarh ...	9,322	13	0	3,435	3	8	5,887	9	4	...	...	...
Total ...	25,310	5	10	11,983	5	9	13,327	0	1	...	...	...

The receipts are but little more than those of the previous year.

The expenditure has been less, partly on account of the previous year's charges being somewhat increased by the cost of transporting sleepers, and partly owing to the amount of control charges in 1880-81 being smaller.

BETUL DIVISION.

Area and boundaries.

Area and boundaries.

72. The area of the reserves is the same as at the close of the previous year. The Divisional Officer has omitted to note the state of the boundaries, but a great many portions of the boundary line came under the Conservator's personal observation, and were found to be in good order.

Protection and improvement.

Breach of Forest rules.

73. There were three cases in which six persons were prosecuted and convicted for breach of Forest rules. The return of offences compounded is blank, but it is feared that this is due to the record not having been kept up, the Conservator being aware of cases in which compounding was resorted to.

Protection from fire.

74. To the area under special protection from fire no additions have been made. The area protected up to the rains of 1881 and the cost of protection are given below :—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	
Bowergarh ...	38,720	37,760	599	8	6	10	2	6	3·048
Khamapur ...	16,000	16,000	191	6	3	7	10	6	2·297
Total ...	54,720	53,760	790	14	9				
Average for the Division ...						9	6	8	2·825

75. In Bowergarh a fire broke out in the latter part of the hot season, but was speedily extinguished by the establishment.

76. It was found that portions of the area planted up with teak between 1866-1871 in the Machna valley required thinning. This work was commenced, but had not been completed before the close of the year. The portions of these plantations on high ground are coming on well, though the growth would have been better, and the ground would have carried a heavier crop had other species been mixed with the teak.

Yield and working.

77. There has been no change in the system of working. The demand has been somewhat restricted by the extent to which private forests have been worked. The following statement gives the yield of the two reserves :—

	Cubic feet.	Pieces.	Cart-load.		Joti load.	Head load.
			2 Bullocks.	4 Bullocks.		
Teak timber	505	...	...	...	...	...
Dead teak	...	18	...	...	219	84
Wood of other kinds for building purposes and agricultural implements	...	16	72	8	533	2,869
Firewood and charcoal	...	...	12	...	...	15,418
Bambus	...	36,165	...	...	...	...

Financial results.

78. The receipts and charges are as follows :—

Range.	Receipts.			Charges.			Surplus.		
	Rs.	a.	p.	Rs.	a	p.	Rs.	a.	p.
Bowergarh	3,522	5	6	2,556	14	3	965	7	3
Khamapur	5,425	3	9	3,024	10	5	2,400	9	4
Total ...	8,947	9	3	5,581	8	8	3,366	0	7

The receipts have been less, owing partly to the cause mentioned in the preceding paragraph, and partly to the fact that the supply of teak obtainable from trees injured by the floods of 1877 has been worked out, and that the felling of other teak has not been allowed.

79. The forests to the south of the Bowergarh reserve have been much worked and are now deficient in many of the products that Bowergarh is capable of yielding, but roads are required to render the forest accessible from this direction. To this matter the Divisional Officer's attention has been directed.

NIMAR DIVISION.

Area and boundaries.

Area.

80. The area of the 1st class reserves is unchanged.

Boundaries.

81. In the Punasa reserve the boundary is disputed at one point, though the line is that laid down by the Revenue Surveyor following up the work of the Settlement Officer; and in the Khandwa reserve the boundary is disputed in eight places. These disputes doubtless arise from the fact that no two officers taking up the maps available would lay down precisely the same line on the ground; for the small scale maps do not give sufficient detail, while the large scale maps are not always perfectly accurate. As regards area the difference resulting from the disputes is unimportant, but they must nevertheless be settled, and the Chief Commissioner's orders will be taken as to how they should be disposed of, the object being to dispose of them in such a manner as will prevent their being re-opened hereafter.

82. For the improvement of the demarcation of the Khandwa reserve where the boundary is not disputed 135 substantial pillars or rather ridges of well packed stone have been put up at a cost of Rs. 228-7-7.

Protection and improvement.

Watch and guard of the forest.

83. The watch and guard of the forests is fairly good, still there were 282 cases of breach of Forest rules. Only 5 persons in 2 cases were prosecuted. In one case conviction was not obtained; in the other, one of the accused was discharged. In the remaining 280 cases the offenders were allowed to compound.

Protection from fire.

84. The work done under this head and its cost is shown in the following statement:—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Kalibhit	62,080	62,073	289	13	9	2	15	10	0·897
Punasa	81,040	6 0,985	918	10	11	9	10	2	2·892
Chandgarh	61,440	30,920	382	7	7	7	14	8	2·375
Khandwa	35,840	35,760	968	3	3	17	5	2	5·198
Bainpura	600	600	8	9	0	9	2	1	2·740
Ganjari	3,500	3,500	37	0	0	6	12	3	2·030
Undria	3,100	3,090	32	14	0	6	14	8	2·075
Bhojwa and Beheria ...	2,000	2,000	31	8	6	10	6	1	3·115
Ajnal	15,000	15,000	37	4	0	1	9	5	0·477
Chaoria	170	170	10	14	0	40	15	1	12,283
Total ...	2,64,770	2,14,098	2,720	5	0				
Average for the Division ...						8	2	1	2·440

85. The six last entries in the statement refer to areas in the 2nd class reserves which have been selected as 1st class reserves under the Chief Commissioner's orders but have not yet been transferred; they are mentioned here, as their protection was carried out in connection with that of the 1st class reserves. At the close of the official year, notwithstanding the dry season, there was a very prospect of perfect success in Punasa and Chandgarh, but the month of May saw the Chandgarh forest fired in several places in one night, and immediately after there was a similar occurrence in Punasa. That these fires must have been deliberately lighted is evident from the full report on the case made by the Divisional Officer, but the offenders remain undetected. At first suspicion fell on certain residents of villages in the vicinity of the forests, but information subsequently received of the movements of dacoits between the Dhar State and the Berar borders makes it appear probable that these fires were lighted to draw the Forest officials together and leave a clear course for these birds of passage.

86. In these cases there was want neither of zeal nor energy on the part of the establishment, without which the fires could not have been suppressed within the areas to which they were confined.

Sowing and planting.

87. Under this head the want of success is more marked than in the failure in fire protection, but then the extremely short and late rainfall was sufficient to account for failure.

88. Extensive arrangements had been made for sowing and planting in the Khandwa and Punasa reserves. With difficulty labour was procured, and in round figures 10½ lakhs of pits were prepared to receive plants and seed, but the rain kept off till late, and at length when it did fall and the plants were put out and seed was sown, it was neither in sufficient quantity nor of sufficient duration to give the young plants a chance of establishing themselves.

89. Mr. Fernandez would have done well had he at once reported the undertaking a failure, but hoping against hope he commenced to water the plants after the rains were over, in the hope, he has since explained, that by watering up to the commencement of March the plants would be so far established as to be able to live through the hot season. This work of watering was in progress when I visited the division in December last, and finding the proportion of pits in which plants had survived so extremely small, I stopped further expenditure.

90. To aid in the regeneration of the forest in Nimar artificial stocking is a matter of necessity, but it is now evident that with the short and uncertain rainfall of this district, higher cultivation on smaller areas must be resorted to in order to guard against the constant risk of failure from a short or badly distributed rainfall.

91. Between 1st April and the end of May 1880 the cuttings for fuel referred to in paragraph 119 of the report for 1879-80 were extended on a small scale, but the precise area cut over has not been determined. The work was not extended after the rains, for reasons which will be given under the head of 'yield and working'. All charges for clearing cuttings of unmarketable material were debited to A-VIII-f, and as this work was carried on in connection with the preparation of pits for sowing it is difficult correctly to separate them. Omitting the charges for fire protection, which are moderate, the expenditure on improvements amounts to Rs. 11,232, of which Rs. 5,741 is debitable to Punasa and Rs. 5,154 to the Khandwa reserve, the small balance under heads VIII d. and f. being debitable to the Punasa garden and petty operations in Chandgarh and Kalibhit. Of the charges debited against the Khandwa reserve a small sum is debitable to an orange grove established in connection with the nursery.

92. At the close of the year the nursery contained 13,080 teak and 20,188 bambu in nursery beds, 12,680 square feet of seed beds containing bambu seedlings, which should represent a future stock of over 1,00,000 plants, 640 orange and 184 lime trees, besides some exotics and indigenous trees of other kinds. Mr. Whittall, the officer who relieved Mr. Fernandez, has attempted to separate the charges on different works of improvement, but his figures are not given, as on examination of details it is found that there are a considerable number of items which, though placed under the proper budget head, it is difficult to determine to which of the works they are debitable.

93. In spite of the failure herein recorded, resulting from an unfavourable rainfall, the occurrence of fire in certain forests, and the effect of frost in the two previous years, very satisfactory results as regards improvement in the condition of the forest growth generally have been attained. In places the regrowth from previous cuttings suffered severely from frost, and in some cases the shoots were injured by fire, still the regrowth is on the whole good. The seedlings produced prior to protection from fire and cattle being attempted, have made considerable progress, while towards the regeneration of the forest considerable reproduction from seed has been obtained. It is evident that under existing conditions heavier expenditure will have to be incurred to secure protection from fire in Chandgarh and Punasa, and that all expenditure on planting must be confined to such areas as it is possible to cultivate thoroughly and fence completely.

Yield and working.

94. In the system of working there has been no change. It was expected that there would have been heavy cuttings for locomotive fuel, but Mr. Croudace, the Manager of the Holkar and Scindia Neemuch State Railway, raised objections to being supplied with fuel obtained from other than 4 or 5 particular species, and before he consented to receive what the department could supply, the season for action had passed.

95. The question of what woods can advantageously be used as locomotive fuel has been taken up by the present Manager, but it is now uncertain whether on the Holkar Scindia and Neemuch State Railway coal will not be substituted

for wood fuel, and until this question has been disposed of further action regarding the supply of fuel for this Railway cannot be taken.

96. For the reasons already given, the departmental timber operations were confined to the cuttings in Punasa referred to under the head of 'improvement' and the supply to the Railways of 66,000 cubic feet of fuel.

97. The following statement gives the yield of the forests and the stock grazed:—

	Anjun sleepers.	Teak.			Other wood for building and agricultural purposes.			Fire-wood.	Bambus.	Grass, pulas.
		Logs.	Charputs and poles.	Felloes for cart wheels.	Logs.	Poles and posts.	Agricultural implements and cart poles.			
No.	216	19	881	552	4	862	1,092	...	3,96,472	2,96,093
Cubic feet stacked ...	...	...	...	...	...	...	...	71,580	...	...
Cart-load ...	...	..	221	...	39	134	121	3,543	...	10,000
Joti load ...	...	...	153	...	76	32	284	...	...	...*
Bullock load ...	...	..	...	...	...	...	...	29	...	1,568
Head load ...	...	...	...	...	...	1,230	89	100	...	357
Maunds ...	...	...	...	...	...	...	...	163	...	...

Grazing.

Buffaloes	...	...	11,158
Cows and bullocks	...	...	22,956
Goats and sheep	...	...	947
Camels	...	...	5

Financial results.

98. The following statement gives the receipts and expenditure of the past year:—

Range.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a	p	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Kalibhit	8,486	6	7	3,296	7	3	5,189	15	4	...	...	...
Punasa	9,516	11	6	19,315	0	6	...	..	..	9,798	5	0
Chandgarh	2,701	10	5	2,407	4	8	294	5	9	...	...	...
Khandwa	5,871	12	11	12,496	3	4	...	...	...	6,624	6	5
Total ..	26,576	9	5	37,514	15	9	...	...	...	10,938	6	4

99. Had the sowings and plantings of 1880 proved a success, the outlay of Rs. 5,454 over and above the income might well have been afforded, but as it is, the result of the year's transactions is disappointing. It must, however, be borne in mind that the forests have been worked with a view to improvement, and not

merely with the object of maintaining the present possible yield. Kalibhit, it will be observed, has, notwithstanding its comparatively remote position and the outlay on fire protection, given a surplus of Rs. 5,190.

CHANDA DIVISION.

Area and boundaries.

Area.

100. In the area of the 1st class reserves there has been no change.

Boundaries.

101. The boundaries of Bimaram and Mirkullu forests and the Taroba block in Moharli are in good order. The clearing of the remaining portion of the Moharli boundary of the regrowth that had sprung up was in progress at the close of the year, 8 miles having then been cleared. Owing to the Census duties which devolved on the Forest officials the work was delayed till late in the season, but has since been pushed on.

Protection and improvement.

Breach of forest rules.

102. The watch and guard of the forests has been effective. Only 6 cases of breach of Forest rules came to light, and in these cases 13 offenders were permitted to compound.

Protection from fire.

103. The area under protection from fire has not been increased. The area protected and the cost of protection are given below:—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.				Per acre.
			Rs.	a.	p.	Rs.	a.	p.		Pies.
Bimaram ...	12,296	12,296	1,342	3	3	69	13	9		20·958
Mirkullu ...	8,479	8,479	897	1	11	67	11	5		20·315
Taroba ...	25,619	24,472	1,124	5	10	29	6	5		8·821
Goverdhun ...	13,931	13,931	471	14	8	21	10	10		6·504
Total ...	60,325	59,178	3,835	9	8					
Average for the Division ...						41	7	8		12·444

104. Three fires occurred in the Taroba block. The first fire which spread over a small area only was traced to neglect on the part of a subordinate in burning fire-lines, and punishment has been awarded. The enquiry that was made regarding the other two fires, which occurred later, has not brought forth evidence sufficient for the prosecution, though it leaves no doubt that the fires were wilfully lighted and points to certain individuals known to the Forest department as being directly or indirectly connected with their occurrences. The cost of fire protection in the past year varies but slightly from that of 1879-80.

105. The effect of fire protection on the improvement of the growth continues to be very marked. In reporting on the late fires in Moharli the Divisional Officer comments on the extent to which the effect of fire had been diminished by the increased cover produced by continued protection.

106. In Moharli the special cultural operations were confined to planting out a few teak (5,424) in wide bands alternating with belts of natural forest, a method referred to in previous reports as giving satisfactory results.

Cultivation of teak.

107. These were necessarily retarded by the share that the Sub-divisional Officer had to take in Census work, the Census of the entire Ahiri Zamindari having devolved upon him.

Improvement cuttings.

The following statement shows the work done to facilitate the advancement of the young teak crop :—

Division.	Area in acres.	Sub-division.	Number of creepers cut for improvement of teak.	Number of Saj trees selected for sleepers.	Number of other kinds blazed for improvement of forest.	Total.
No. IV ..	179	11	74	220	76	370
	158	10	5	97	10	112
	154	9	113	94	...	207
Total ...	491	...	192	411	86	689

The effect of previous operations of the kind has been decidedly beneficial, and further cuttings are fast becoming a matter of urgent necessity.

Yield and working.

108. The Mirkullu forest was not worked. The Bimaram reserve was worked for dead teak and saj resulting from improvement cuttings. In the arrangements for working the Moharli forest no change has taken place.

109. During the year under report 25,649 logs containing 2,93,253 cubic feet were collected at the Allapilli depot. 18,230 logs containing 2,08,229 cubic feet were converted at the saw mills, yielding 88,394 pieces measuring 134,740 cubic feet. 77,057 pieces measuring 102,242 cubic feet were transported by land from Allapilli to Donarghat on the Weinganga. 82,667 pieces of 122,779 cubic feet were rafted up-stream to Tidighat, a distance of 98 miles. 51,124 sleepers were transported from Tidighat on to the Railway and delivered; while in round numbers 30,000 more were in transit for the line at the close of the year. A few bambus and some small wood were also taken from the Moharli forest to the Warora depot.

110. The collection of minor forest produce on account of Government was confined to Moharli forest. 8,643 sers of hurra, 59 sers of lac, and 606 stag horns were there collected.

Collection of minor forest produce.

The out-turn of the forests is given in the following statement :—

Range.	Timber and building wood.				Wood for agricultural implements and carts, manufactured poles and pieces.	Bambus.	Bambu mats, baskets &c.	Fuel.		Charcoal, head load.	Grass.	
	Teak, cubic feet.	Saj, cubic feet.	Other kinds, cubic feet.	House posts and poles.				Cart load.	Head load.		Cart load.	Head load.
Ahiri ...	4,715	56,806	...	...	...	...	...	...	...	...	...	...
Moharli ...	10	...	7,453	39,180	50,315	815,431	639,420	1,218	14	2,734	6,165	630

The number of cattle grazed was as follows :—

Buffaloes	... ...	448
Cows and bullocks	...	5,105
Sheep and goats ...	...	338

111. The next two statements illustrate the result of working the saw machinery :—

Timber cut up.		Feet cut.		Out-turn.				Current charges.		
Logs.	Cubic feet.	Running feet.	Superficial feet.	Kind and description of timber.		No. of pieces.	Cubic feet.	Rate per 100 cubic feet.	Total.	Remarks.
18,230	208,227	16,84,393	10,13,816	Teak sleepers 6'×8"×5"	...	31,292	52,131	Rate per 100 cubic feet Rs. 8-10-6	Rs. 11,172-6-1	Rate per 100 c.ft. of rough timber Rs. 5-5-10
				Teak bussola sleepers 6'×8"×5"	..	5,077	8,458	" running feet " 0-10-7		
				Saj sleepers 6'-8"×5"	...	36,299	61,896	" superficial ft. " 1- 1-7		
				Saj bussola sleepers 6'×8"×5"	...	432	720			
				Moyin sleepers 6'×8"×5"	...	80	133			
				Rounja sleepers 6'×8"×5"	...	239	398			
				Padul sleepers 6'×8"×5"	...	24	40			
				Teak scantlings between 25" and 50".		4,707	2,688			
				Saj rails under 25"	...	4,543	1,132			
				Saj planks	...	2,112	1,461			
				Total	...	84,805	1,29,057			

Detail of Charges.

Particulars.	Amount.			Total.		
	Rs.	a.	p.	Rs.	a.	p.
Pay of Native Foreman...	762	4	1			
Pay of establishment employed on machinery	6,741	8	10			
Do. do. on timber	1,691	13	9			
Do. do. on fuel	374	7	0			
Do. do. on watering	226	12	3			
Oil, grease, stores, &c., for working	1,037	12	10			
Repairs, including workshop establishment	337	11	4			
Contingencies	...	...	...			
Extraordinary charges	...	...	...	11,172	6	1
A.—Total current charges	11,172	6	1			
B.—Add cost of establishment and maintenance during recess ...	...	...	...			
C.—Add 10 per cent capital outlay on machinery	4,000	0	0	15,172	6	1
Total charges per 100 c. ft. marketable timber ...	11	12	1			

Financial results.

112. In the next statement are given the receipts and charges for the past year :—

Range.	Receipts.	Charges.	Surplus.	Deficit.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ahiri ...	18,869 14 11	1,36,013 13 7	... ...	1,17,143 14 8
Moharli ...	22,231 15 2	11,048 4 3	11,183 10 11	... ...
Total ...	41,101 14 1	1,47,062 1 10	... .	1,05,960 3 9

The deficit is due to funds not being available for the adjustment of a debt to the department on account of sleepers for the Chhattisgarh Railway, the amount of which was Rs. 1,25,600. The full amount of this debit does not appear in the accounts, owing to the receipt of a considerable portion of the material not being formally acknowledged till some months after delivery. The above amount, together with a further liability of Rs. 54,483 accruing to the department immediately after the close of the year, is now under adjustment. The amount outstanding at the close of the year will convert the deficit for 1880-81 into a surplus, small it is true, but nevertheless satisfactory, considering the important part the Forest establishment had to take in Census work, and that, of the charges, about Rs. 15,000 are on account of conservation and improvement.

SEONI DIVISION.

Area and boundaries.

Area and boundaries.

113. The area of the reserves remains unchanged. On the maintenance of boundaries the outlay was only Rs. 64. The Divisional officer having joined late in the year does not certify to the condition of the boundaries, but those round the areas under protection from fire are known to be in excellent order, and there is reason to believe that all other boundaries have been properly maintained. The practice of allowing private individuals to clear them in consideration of being given the grass and other produce obtainable from the boundary line has been continued.

Protection and improvement.

Breach of Forest rules.

114. From the returns it appears that forest offences have been rare. In 5 cases 9 persons were prosecuted for breach of Forest rules, and the conviction of 7 persons in 4 cases obtained. The return of offences compounded is blank, but it is feared that this is the result of an error in record.

Protection from fire.

115. There has been an addition to the area under protection in the Nurhur block, comprising 39,040 acres. This area lying between two blocks already protected was included

rather for the sake of economy than with a view to extension of area. The work done under this head and its cost are shown in the following statement :—

Blocks.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. a. p.	Rs. a. p.	Pies.
Korai	31,210	31,210	461 3 0	9 7 3	2·837
East Pench	42,580	42,580	554 9 5	8 5 4	2·501
Nagulwari	9,680	9,680	78 7 9	5 3 0	1·557
Paraspani	8,240	8,240	67 2 8	5 3 5	1·565
Sakata	10,020	10,020	260 9 6	16 10 3	4·993
Nurhur	39,040	39,040	323 8 6	5 4 10	1·591
Total ...	1,40,770	1,40,770	1,745 8 10	.....	...
Average for the Division ...				7 14 11	2·381

The comparatively high charges against the Sakata block cannot at present be explained.

Other measures for improvement of the forest.

116. Regarding the other measures adopted for improvement of the forests very little can here be stated, as owing to the changes of officers, and the officer in charge at close of the year being new to the division, the returns furnished are not complete.

With the view to filling up blanks in the Korai range, seed was sown in 4 foot wide, ploughed bands 20 feet apart, and some teak was also planted out on an area of about 10 acres. Some of the sowings of previous years were also weeded.

117. The cutting back of badly grown teak was also continued, and simultaneously the cutting out of creepers and the removal of obstructions to the growth of better species were carried on. The number of teak trees cut back was 4,356. The charges against these different works amounted in all to Rs. 1,012-4-5, but the amounts against each have not been properly separated, and there would not be time to extract them in this office till after this report is closed.

118. In the West Pench range there was an outlay of Rs. 221-10-2 on the planting out of teak in blanks and in well cleared lines in forest of inferior species, and from the report of the Forest ranger who recently visited the site the result of the planting is satisfactory. The sowings of previous years have not made that progress that the first appearance of the plants justified. The difficulty in raising forest by sowing "in situ" results from reconsolidation of the soil before the plants send their roots deep enough to ensure good progress.

Yield and working.

119. In the arrangements for working the forests there was no change during the year. Except in the Sonawani range, and to meet special wants on a small scale elsewhere, the forests are worked only for annual products and dead wood.

120. The following statements give the out-turn of material and the number of cattle grazed during the past year :—

	Number.	Cart load.	Bangly load.	Head load.
Poles	4,817	...	...	...
Wood for building purposes	...	151	...	3,322
Fuel	...	9,847	59	53,900
Bambus	559,613	1,227	...	4,492
Grass, pulas	149,125	4,869	...	219

Grazing.

Buffaloes	4,424
Cows and bullocks	32,794
Ponies	20
Sheep and goats	1,415

Besides the above, 25,390 head of cattle of all kinds were grazed for short periods.

Financial results.

121. The following statement shows the result of the cash transactions for the year in the four ranges of this division.

Range.	Receipts.			Charges.			Surplus.			Deficit.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Korai ...	6,012	1	9	6,526	2	11	...	...	...	514	1	2
East Pench ...	4,965	9	2	3,653	11	0	1,311	14	2	...	...	...
West Pench ...	4,697	12	6	3,089	15	2	1,607	13	4	..	...	...
Sonawani ...	5,086	2	0	3,241	6	9	1,844	11	3	...	...	...
Total ...	20,761	9	5	16,511	3	10	4,250	5	7	...	...	...

The receipts and charges in 1879-80 were raised by an exceptional demand for sleepers for which there is no equivalent in the year under report. The ordinary receipts and the surplus resulting therefrom has, however, increased, as illustrated by the following figures showing the revenue and expenditure less receipts and charges on account of timber brought to depot by Government agency.

	Receipts.	Charges.	Surplus.
1879-80	17,806	15,426	2,380
1880-81	19,622	15,955	3,667

The receipts of the past year were kept down by the small demand for grass following an abundant harvest of karbi.

SAUGOR DIVISION.

Area and boundaries.

Area and boundaries.

122. The area of the reserves is the same as at the close of the previous year. A sum of Rs. 170-10-6 was spent on the maintenance of boundaries, which are all in good order.

Protection and improvement.

Breach of Forest rules.

123. There were 184 cases of breach of rules in which 348 persons were involved. In 2 cases 2 persons were prosecuted and convicted; in all other cases the offenders were allowed to compound. Compared with the area the number of offences is high, but not so if the accessibility of the forest be taken into account.

Protection from fire.

124. The following statement shows the areas under special protection and the expenditure on them :—

Range.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. as. p.	Rs. as. p.	Pies.
Garhakota	2,899	2,899	15 2 0	3 5 5	1·002
Hathkho	10,598	10,598	276 11 4	16 11 4	5·013
Ranjir	1,987	1,987	13 3 6	4 4 1	1·277
Ranipura	2,720	2,720	113 2 7	26 10 0	7·988
Jalandhar	2,885	2,885	15 6 0	3 6 6	1·023
Total ...	21,089	21,089	433 9 5		
Average for the Division ...				13 2 6	3·948

The foregoing statement, however, exhibits only those areas on which special expenditure was incurred. With an insignificant exception the remaining area of the 1st class reserves was successfully protected from fire during the dry season of 1880-81, and Mr. Foster, the Divisional officer, has earned credit for his success in this respect.

125. From the areas returned as under special protection from fire, cattle have been excluded.

Planting and sowing.

126. Planting and sowing to fill up blanks have been carried out on a moderate scale in Garhakota, Hathkho and the Ranipura forest. In Garhakota in continuation of the previous year's work 21,047 bambu clumps were planted out 15'×15' where the soil and inclination were sufficiently favourable. The planting of bambu on the suitable area in compartment A has thus been completed, while part of compartment B has been planted up. In round numbers 2,000 plants were destroyed by wild hog; otherwise the planting has been a success. The total outlay on this work was Rs. 1,528-6-9, or about Rs. 14 per acre for the area planted. The rate is high, which is due partly to the cost of watering nurseries, and partly to the necessity of fencing.

127. In the same reserve in compartments G and H, comprising the hilly portion of Garhakota, with an area of 720 acres, bambu seed was sown at more or less regular intervals on the slopes and between the rocks where there is generally an accumulation of good soil. The seed germinated freely, and probably the young plants will make fair progress this rains, though they can hardly be expected to come on as fast as the planted bambus. The cost of the sowings was trifling, amounting only to Rs. 7-13-0. On fifty acres of undulating ground previously leased out for cultivation bambu was sown broad-cast, the land having been previously prepared by ploughing. One half of this sowing has proved successful, the plants, though small, being strong and hardy. On the remaining half where a crop of rank grass sprang up, weeding was deferred too long, and this portion must be regarded as a failure. The cost of this operation was

Rs. 515-1-6, or nearly Rs. 21 per acre for the area that proved successful. As, however, of the above expenditure Rs. 114 were for fencing, Rs. 194 for weeding, and Rs. 51 for watching, it is evident that similar undertakings should be less costly in the future.

128. In Ranipura 3,670 bambu and 6,134 sissu were planted out 15'×15' at a cost of Rs. 360-6-8. Should the sissu really succeed well it will be a valuable addition to the forests, seeing how heavily saj suffered during the frosts of 1878-79 and 1879-80.

129. In the Hathkho reserve 16,035 bambu plants were put out 15'×15' on the hills and in the ravines in compartment Nos. 13 and 14, at a cost of Rs. 490-12-10. The Divisional officer reports that very few plants have failed.

130. Several nurseries have also been formed to supply plants for future planting operations, and on a small scale seed of different useful trees has been sown broad-cast and in prepared plots.

131. In the previous sowing of 1875-76 and 1878 the young plants are making fair progress. Some bambus put down on the Sonar river in 1873 now form dense forest, while others planted along the nala, passing the Garhakota bungalow, in 1874 have in some cases run up to 30 feet.

132. The only other work of improvement has been the cutting back of trees that suffered from the frost of 1878-79 and 1879-80.

Yield and working.

133. With the exception of a few poles and some ill-shapen trees cut over as fuel in Ranjir no green wood was felled. The forests have, however, been worked for dry wood and minor produce. A considerable portion of the dry wood removed from Ranipura and Garhakota was obtained from frost bitten trees.

134. The yield of the forests is shown in the following statement :—

	Number.	Cart-load.	Buffalo, bullock, pony and donkey load.	Head load.	Basket load.	Estimated weight in tons.
Teak logs	29	...	...	...	...	6·00
Dead teak	51	57	...	...	...	17·39
Teak poles	9,170	...	...	...	...	135·84
Timber of other kinds	5	...	...	...	...	1·50
Poles of other kinds	1,277	...	...	116	...	11·79
Axles, ploughshares and yokes ...	116	...	...	...	...	0·72
Firewood	...	1,171	3,644	2,709	1,674	777·66
Charcoal	...	...	...	1,710	...	31·66
Bambus	2,542	...	...	...	...	3·77
Grass, pulas	10,800	246	...	1,584	...	136·71

135. The stock grazed in the areas open for this purpose was as follows :—

Buffaloes	...	...	2,530
Cows and bullocks	...	...	9,706
Ponies	...	...	36
Sheep and goats	...	...	484

Financial results.

136. The following form shows the financial results in each reserve :—

Range.	Receipts.	Charges.	Surplus.	Deficit.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Garhakota	2,499 11 7	3,460 5 8	... ...	960 10 1
Tigora	342 0 0	453 2 1	... ...	111 2 1
Ranipura	1,061 12 9	1,642 3 10	... ...	580 7 1
Ranjir	1,223 0 3	1,104 3 5	118 12 10	... ...
Hathkho	2,405 0 3	2,660 11 1	... ...	255 10 10
Total ...	7,531 8 10	9,320 10 1	... ...	1,789 1 3

Considering the strict conservation that it is yet necessary to enforce and the amount that has been spent on improvements, calculated to increase the future income and more fully meet the requirements of the people, the result of the year's transactions is far from being unsatisfactory.

CHAPTER III.

SECOND CLASS RESERVES.

NAGPUR DIVISION.

137. The area of the reserves is the same as at the close of 1879-80. The system of demarcation referred to in paragraph 186 of the past year's report has been extended and nearly completed.

Area and boundaries.

138. As a protective agency the establishment has worked fairly well, though a falling off in the grazing dues is said to be partly attributable to the want of vigilance on the part of some of its members.

Protection.

139. Thirty-seven cases of breach of Forest rules were reported ; of these 8 cases in which 16 persons were involved were taken into Court, and the conviction in 7 cases of 14 persons obtained. Twenty-nine cases in which 115 persons were involved were compounded.

140. At present the measures adopted for the improvement of the forests are confined to the protection and conservation of the existing crop, secured by restrictions on cutting, and it must be acknowledged that the result of these restrictions has been satisfactory and is gradually paving the way for treatment on scientific principles. The next step on a moderately large scale will be the eradication of inferior species and the cutting back of badly grown trees of the better species, but, for reasons that need not here be detailed, it has not yet been possible to put such work in progress; in fact it has been found that there are but few places where the forests are yet ripe for it.

Conservation.

141. As in the previous year the cutting of the 16 most important species except with the special sanction of the Divisional Officer has not been allowed. Of these species the quantity cut and removed during the past year only amounted to 7,191 poles under and 200 above 12 inches in girth.

142. The right to collect and remove minor produce was leased, and there is no record of the produce removed.

The quantity of other material removed was—

		Cart loads.	Head loads.
Timber	...	495	522
Fuel	...	13,127	24,573
Bambus	...	60	5,039
Grass	...	1,632	2,817

These figures indicate an increase in the demand under all heads but bambus, of which the supply is extremely small; under the head of grass the figures do not include the yield of "birs" leased for the year. The figures above given, however, convey no idea of the demand that these forests will be called on sooner or later to bear, because at present the greater portion of the demand is met from private forests, as illustrated by the fact that of 9,225 cartloads of fuel and 2,004 cart loads of poles, of which account was taken when coming into Kamptee, no less than 8,256 cart loads of fuel and 940 of poles came from the private forests adjoining those belonging to Government in the Ramtek Tahsil.

143. The number of cattle grazed was smaller than in the previous year as indicated by the following figures :—

		1879-80.	1880-81.	Difference.
Buffaloes	...	6,660	6,096	564
Bullocks and cows	...	79,301	69,737	10,564
Goats and sheep	...	24,058	17,641	6,417

The Commissioner suggests that the falling off may be due to a slight modification of rates that was introduced to make the higher rates convenient multiples of the lowest one; but on this ground the number of cows and bullocks grazed should have been larger, the rate for them having been reduced. My own impression is that the difference is due to various causes, the demand for sheep and goats to manure fields is steadily increasing and may draw flocks away from the Government forests. A favorable rainfall may, and probably did admit of stock being grazed in the open country when it is usually necessary to send them to the forests, while the abundant crop of "karbi" may have admitted of such stock being kept at home for the rest of the year. It is also probable that changed conditions of traffic may have led to the exit of Banjaras, many of whom with their droves are known to have left the district, and it is further possible that in some cases there may have been want of vigilance in preventing grazing without license.

Receipts and charges.

144. The figures for the past two years stand as follows :—

		1879-80. Rs.	1880-81. Rs.
Receipts	...	30,611	26,324
Charges	...	14,105	13,343
Surplus	...	16,506	12,981

The difference under charges is due to a difference in the amount of pay and travelling allowance drawn by the Divisional officer. Under the different revenue heads there have been slight variations, but the decrease must be ascribed mainly to the decrease in the stock grazed. The revenue is yet small for so populous a district, but as already indicated there are yet other sources of supply, and after the prolonged period for which the forests were open to more or less indiscriminate felling, they cannot at once be expected to yield a large revenue.

BHANDARA DIVISION.

Area and boundaries.

145. The area of the reserves is unchanged. Malguzars have been required to keep clear the boundaries where they are conterminous with the Government forests, but at present it is by no means certain that these boundaries are correctly defined. This matter is receiving attention.

146. There were 40 cases of breach of Forest rules in which 114 persons were concerned. In all cases prosecution was resorted to, and the conviction of 102 persons in 35 cases was secured.

Protection.

147. The arrangement detailed in paragraphs 192 to 196 of the past year's report has undergone no change.

Improvement and conservation.

148. The two small areas of Koknagarh and Gangajhiri, in which teak constitutes an important element in the crop, have been strictly protected, and it may be said that change from commutation to that of direct payment, by putting a check on wasteful cutting, must tend to the improvement of the forests, but it is yet too soon to look for results that would be generally apparent.

149. From the Deputy Commissioner's report the present arrangements would not appear to be popular, but then commutation while it was in force was not popular either, though the people had become reconciled to it. Moreover that they now have to pay more for the same quantity of forest produce and that a smaller area of forest is open for cutting is due to the wasteful procedure of the people themselves, whereby the value of such produce has been enhanced and the necessity for giving rest to certain forests has become imperative.

150. It was expected that the restrictions introduced in November 1879 would be attended with a considerable diminution of the present revenue, and the receipts for the past year were certainly less than those for 1878-79. The actual falling off, however, is not as great as might have been expected as will be seen from the following statement :—

Receipts and charges.

		1878-79. Rs.	1879-80. Rs.	1880-81. Rs.
Receipts	...	48,747	41,078	44,618
Charges	..	3,051	3,644	8,229
Surplus	...	45,691	37,434	36,389

151. The receipts of the past year include a payment in advance of Rs. 681-12-0 on account of commutation fees for 1881-82. In the net receipts it will be observed that there is a considerable difference, but it must be remembered that when the whole population was induced to commute and there was no restriction on the use of the forests, very little expenditure on account of establishment was necessary. The change of system coming into force as it did only in the middle of November 1879 had no appreciable effect on the charges for that year, more especially as the full establishment required could not at once be obtained. This combined with the fact that for part of 1880-81 a gazetted officer was attached to the division, accounts for the higher charges and consequently smaller surplus in the past year.

WARDHA DIVISION.

152. The recorded area of the reserves is the same as at the close of the previous year. There is yet much to be done for the improvement of boundaries, and in some cases correction is necessary. The boundaries of the Erjarh and Dhuga forests were cleared, but owing apparently to the heavy Census work no revenue official could be spared to check other boundaries and thus admit of the work of demarcation progressing.

Area and boundaries.

Protection and improvement.

153. In the matter of protection there can be no doubt that the establishment labours under difficulties, resulting partly from the revenue system and

partly from the distribution of the forests. Still I consider that, in the Northern forests, at least, the protective arrangements have been fairly successful.

Forest offences.

154. There were 16 cases of breach of Forest rules in which 27 persons were charged. In each case conviction was obtained, though 11 persons in all were discharged. In 4 cases the offences were compounded.

Protection from fire.

155. The Erjarh and Dhuga forests were successfully protected from fire by a series of broad lines cleared to a width varying from 200 to 300 feet. The actual area protected and its cost is given in the following statement :—

Forest.	Area in acres.		Cost.								
	Attempted.	Actually protected.	Total.			Per square mile.			Per Acre.
			Rs.	a.	p	Rs.	a.	p.	Pies.
Dhuga	25,600	25,600	216	6	0	5	6	6	1·623
Erjarh	12,813	11,693	25	2	6	1	6	0	0·414
Total ...	38,413	37,293	241	8	6	...	...	...	...
Average for the Division ...						4	2	3	1·243

The charges on this account were extremely low, but notwithstanding th success of the past year it is probable that they will have to be increased.

156. Sowings of bambu (*Dendrocalamus strictus*) in pits 15 feet apart were made on an area of 62 acres. These sowings have proved a failure, as might be expected, considering the short rainfall of the past year in this portion of the Provinces; and the long break that occurred when rain was most wanted, and might most reasonably have been expected. To the bambu sowings of the previous year much damage was done by rats, and in some cases by porcupines, but judging from observed results there is reason to expect that a large proportion will live on, and develope into good clumps.

157. The worked out condition of the Wardha forests has formed the subject of frequent comment. It must, however, be admitted that in portions of these forest a very marked improvement has taken place during the past 4 or 5 years. At present this improvement is chiefly confined to the valleys, though in some cases it is found at high elevations also, but if protection is continued it will gradually but surely become more general and more progressive.

Departmental timber works.

158. In the Dhuga forest 6,145 teak poles which had suffered from fire, and other causes, were cut over, collected in the forest and sold for Rs. 2,027-5-3 ; the charges on this account are not separately shown, but they could only amount to a very small portion of the sale proceeds.

159. An attempt was also made to reduce the cost of extracting fuel by casting the wood adrift during floods, and catching it where required, but it cannot be said that the experiment was attended with any measure of success.

160. The Wardha and Arvi depots, started as an experiment in 1879-80, have been kept up. They were started partly with a view to profit, and partly

to meet certain local requirements not otherwise fully met. During the year grass and wood of various kinds were brought into these depots. The receipts from them amounted to Rs. 4,714 and the charges against the produce brought in, to Rs. 2,001. From the time they were started the receipts have been Rs. 9,188 and the charges Rs. 4,955, leaving a surplus of Rs. 5,233 plus stock in hand to the value of about Rs. 1,000. The expenditure as above quoted does not include a share of direction and control charges, and the expediency of maintaining these depots is an open question, though they have certainly been a source of some profit.

161. The general revenue arrangements would not appear to have worked satisfactorily and their amendment is now under consideration.

Receipts and charges.

162. Before adverting to the receipts and expenditure of the past year I would note with reference to paragraph 16 of the Chief Commissioner's review of the report for 1879-80 that owing to a gazetted officer being attached to the district for a longer period than in the previous year and that officer's salary being raised by 100 per mensem the expenditure on this account was larger in 1889-80 than in the previous year by Rs. 3,430. More money was also spent on works of improvement; and lastly, in spite of a fall in the value of the grass birs, the revenue was kept up by increased outlay in bringing produce to depot. In these charges there is nothing to which exception can possibly be taken. As compared with the year 1879-80 the receipts and charges for 1880-81 are not at first sight so favourable They are as follows:—

	1879-80. Rs.	1880-81. Rs.
Receipts ...	29,134	28,335
Charges ...	12,935	14,369
Surplus ...	16,199	13,966

163. The decrease in receipts is more than explained by the difference in the realizations under fines and forfeitures, which amounts to about 1,000 rupees. Looking to the ordinary source of revenue the receipts still show a tendency to rise. The increase in expenditure is due partly to the Divisional Officer's total salary for the year under report being larger than in 1879-80, and partly to increased expenditure on conservation and improvement. It is only to be regretted that it was not possible to spend more on improvement.

CHANDA DIVISION.

Area and boundaries.

164. There has been no change in the area or boundaries of the 2nd class reserves.

Forest offences.

165. The number of offences reported was 1,032, in which 2,406 persons were concerned; of these 967 cases concerning 2,264 persons were compounded. Sixty-five cases in which 142 persons were involved were taken into Court and the conviction of 131 persons in 61 cases secured. The prosecutions were in excess of those of the previous year by over 100 per cent, and the Divisional Forest Officer remarks that most of them might more advantageously have been compounded. The number of prosecutions is, however, small as compared with the number of offences reported, and, as the Deputy Commissioner remarks, the percentage of convictions was very much better than in the previous year.

Conservation and improvement.

166. Under this head, protection only has been practicable in the past year, but a record is now being prepared of the forest tracts that are most worthy of attention.

167. The revenue system as defined in paragraph 186 of the report for 1878-79 has undergone no change.

168. Of a total of 1,02,859 households open to commutation, 93,671 commuted, 72,160 at 2 annas per house for fuel and grass only, 21,511 at 4 annas per house for building wood, as well as grass and fuel. Of the quantity of produce removed under commutation there is no record.

169. The following statement exhibits the quantity of produce removed on license at the higher and lower rates of forest duty :—

Description.	Number at higher rate of forest duty.		Number at lower rate of forest duty.		Total.	
	Cart-load.	Head-load.	Cart-load.	Head-load.	Cart-load.	Head-load.
Timber	1,209	4,278	25,150	5,976	26,359	10,254
Bambus	791	21,922	14,002	20,037	14,793	41,959
Charcoal	...	...	86	13,326	86	13,326
Firewood	...	..	10,922	51,510	10,922	51,510
Buckal ropes	...	2,001	...	...	..	2,001

170. The amount of stock grazed in the forests during the year was as follows :—

		Number.
Male buffaloes	...	10,434
Milch buffaloes	...	23,538
Cows	...	1,50,544
Bullocks	...	67,380
Sheep and goats	...	85,819

Receipts and charges.

171. The revenue amounted to Rs. 71,846, and including a percentage of the Divisional Officer's pay and travelling allowance, the charges amounted to about Rs. 16,916, thus giving a surplus of Rs. 54,930. Leaving control charges out of account, the receipts and charges for the past five years were as follows :—

	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	26,137	30,332	74,287	69,118	71,845	2,71,719
Charges ...	3,709	4,078	8,771	10,932	11,098	38,588
Surplus ...	22,428	26,254	65,516	58,186	60,747	2,33,131

172. The high price of mohwa during 1878-79 is more than sufficient to account for the larger income obtained in that year, as indicated by the following figures showing the realizations from this source for five years:—

				Rs.
1876-77	...	...	...	1,537
1877-78	...	...	...	5,128
1878-79	...	...	...	11,707
1879-80	...	...	...	6,105
1880-81	...	...	...	3,287

It is evident that these realizations have been regulated by the market value of the product, and that the latter has been governed by local circum-

stances, such as the price of grain and the failure or success of the mohwa crop in other parts, and is not due to variations in the demand for export.

173. In a preceding paragraph a lower and higher rate for the sale of forest produce has been referred to, and it is here worthy of note that the quantity of timber and bambus which at the lower rate brought in Rs. 10,600 would, at the higher rate, have brought in Rs. 1,12,000. The lower rate at which people of the district are allowed to supply their own wants falls, in the case of timber, at the rate of 8·34 per cent, and in that of bambu 10 per cent on the higher rate paid by traders and people coming from Berar and other districts. These facts are chiefly of interest as they illustrate that the revenue has not ceased to be capable of further development

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BALAGHAT DIVISION.

Area.

174. The area of the 2nd class reserves is unchanged. Possession of some 60 square miles of forest land has been restored to Government, but this must for the present be treated under the head of unreserved forest.

Protection.

175. More stringent measures were necessary to prevent unauthorized use of the forest and abuse of privileges granted. Still only 92 persons were prosecuted in 39 cases. In 31 cases 66 persons were convicted. In 228 cases the 241 offenders were permitted to compound.

Conservation and improvement.

176. The forest blocks referred to in paragraph 182 of the report for 1878-79 continued closed against cutting, while a small area of about 2 square miles at the foot of the Oda and Gangalpara ghats was similarly closed in 1880-81. A practice of killing trees with the view of subsequently removing the material as the natural dead and dry wood of the forest appears to have sprung up, and the Deputy Commissioner reports that the Uskal block has thus been much cut into.

177. It was stated in the report for 1879-80 that the Pandratola reserve had been successfully protected from fire, but it now appears that in May 1880 two square miles of this small area were burnt. Protection for the dry season of 1880-81 is reported as complete.

178. In the small "tun" plantation put down in the Pandratola reserve in the rains of 1880, the young trees have attained an average height of 4 feet, and will probably now run up rapidly.

Receipts and charges.

179. As compared with the 4 preceding years the receipts and charges are as follows:—

	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.
	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	25,749	29,750	25,718	26,956	31,807
Charges ...	5,196	5,299	5,578	5,721	7,676
Surplus ...	20,553	24,451	20,140	21,235	24,131

180. The increase in the expenditure of the past year is due to the increase of establishment found necessary to check wasteful and destructive cutting. The comparatively high realizations of 1877-78 are due to the high price which such minor produce as Hurra commanded in that year. In the past year the receipts

from grazing have been less, those from commutation, timber and firewood more. The decrease is said to be due to fewer cattle having been brought to the uplands for grazing and to mortality amongst the local stock. Possibly the prevalence of disease may have deterred people from taking their cattle to places where herds congregate, the risk of so doing being great. The increased receipts from fuel are said to be due to out-stills now having to pay for the fuel used in working them; that under the head of commutation, to duty having been levied on timber of the reserved kinds in forest attached to villages under provisional 10 years' lease; while that under the head of timber is probably due to a more brisk demand. The Deputy Commissioner so far from being hopeful of a further increase of revenue anticipates that the receipts will fall, but in this I am not disposed to agree with him. In the revenue from different sources and in different years there may be fluctuations, but I confidently anticipate that the means will be devised not only for maintaining but also for increasing the present income.

JUBBULPORE DIVISION.

Area and boundaries.

181. Though in the recorded area of the reserves in this division there has been no increase or decrease, it would appear that proprietary rights have been acquired in 6 plots aggregating 5,340 acres still included in the area of the reserved forest. The cutting of 6 foot lines along the boundaries is said to have been continued, but the extent to which this has been carried out has not been reported. The work has been carried out by the Malguzars in consideration for their being permitted to remove the produce cut on the line, and under the direction of the Patwaris acting under the orders of the Tahsildars. The arrangement may be convenient as facilitating the checking of boundaries by a more reliable agency.

182. According to the Deputy Commissioner's report the number of forest offences recorded was 156, involving 543 persons. In 65 cases against 129 persons the evidence appears to have been insufficient. In 51 cases 139 persons were prosecuted and 123 convicted, while in 40 cases the 275 persons concerned compounded. It would appear that the number of offences was smaller than in the previous year, but it is not certain that this may be accepted as an indication of more complete protection.

Conservation.

183. The forest blocks specified in paragraph 193 of the report for 1878-79 have remained closed against cutting. The species specially protected against cutting in other parts are the same as in the previous year.

Receipts and charges.

184. As compared with the previous year the receipts and charges stand as follows:—

		1879-80. Rs.		1880-81. Rs.
Receipts	...	19,769	...	17,059
Charges	...	7,374	...	5,450
Surplus	...	12,395	...	11,609

185. In 1879-80 an increase of establishment was considered necessary for protective purposes, a circumstance which has affected the charges of both years. The difference in the charges for the two years is mainly due to the fact that an officer of the superior staff was attached to the division for part of 1879-80. The chief decrease during the past year has been under the heads of 'grazing' and 'minor forest produce,' and has been only partly counterbalanced by an increase under other heads. The decrease in the grazing dues appears mainly attributable to there being fewer instances in which double fees were imposed, while in March 1880 the value of grazing licenses taken out for the succeeding year exceeded that of licenses similarly sold in March 1881 by nearly 1,000 rupees.

186. The revenue is at present small, but if protection of the forests is secured the present limited income need not be complained of. Doubtless, as the Commissioner remarks, the very large area of private forest is the chief cause of the present small receipts.

SAUGOR DIVISION.

Area.

187. The area of the 2nd class reserves has been increased by 5,105 acres, representing the area of certain lands resumed and declared reserved forest by Notification No. 4796 of 23rd December 1880, thus raising the total area at the close of the year to 474,488 acres.

Protection.

188. There were 1,134 cases of breach of Forest rules. In 32 cases 60 persons were prosecuted, and the conviction of 40 persons in 22 cases secured. In 1,079 cases 2,580 persons concerned were permitted to compound.

Conservation and improvement.

189. The chief measure for the conservation and improvement of the forest has been the protection of certain areas against irregular cutting. In the south-east forests the arrangements defined in paragraph 256 of the report for 1877-78 continued in force. Of the much denuded area of the Apchund forest, four-fifths have for the present been closed against cutting, while in the Rahatgarh and Bassia-gond forest, as a preliminary measure, four-fifths of the area has been closed.

190. The Jalandhar block of 2,885 acres forming part of of the Bassia-gond forest, and including the sandal wood producing area of about 100 acres, was successfully protected from fire. In the remainder of the forests fires have as usual been of common occurrence, but it would nevertheless appear that a considerable area has escaped, owing to the establishment being required to extinguish fires when they occurred.

191. The quantity of produce extracted is shown in the following statement :—

	No.	Cart load.	Buffalo and pony load.	Yokes.	Head load.
Teak poles	3,653	...	...	...	...
Bija and saj poles	291	...	...	...	...
Poles of other kinds	659	...	...	...	...
Timber of other kinds	218	...	...	...	...
Building wood	...	916	197	14	15,062
Firewood	...	26,721	3,478	10	38,302
Charcoal	...	177	76	...	6,256
Bambus	1,17,543	...	...	...	...
Grass	...	12	19	...	2,911

192. The 2nd class reserves furnished grazing for livestock as follows :—

			No.
Camels	...	...	9
Buffaloes	...	...	40,216
Oxen	...	...	1,74,679
Ponies and donkeys...		...	691
Sheep and goats ...		...	14,162

Receipts and charges.

193. The following is a comparative statement of receipt and charges for the two past years :—

		1879-80. Rs.	1880-81. Rs.
Receipts	... ...	50,557	48,330
Charges	.. ...	17,659	18,848
	Surplus ...	32,898	29,482

194. The gross receipts for 1880-81 were Rs. 2,226 less than in the previous year. The chief differences are as follows :—

	Increase. Rs.	Decrease. Rs.
Head II.—Commutation	371	...
Timber	...	878
Firewood and charcoal	...	2,859
Bambus	409	...
Grazing	...	821
Minor produce	1,329	...

Of the decrease under firewood and charcoal Rs. 2,197 are accounted for by the realization in 1879-80 of an outstanding of the previous year. The remainder of the difference is due to reduced rates. The other differences cannot at present be fully explained. Probably the same causes that have told on the grazing dues in most other divisions, have also affected the receipts in Saugor, while it is believed that the increase under minor produce is due to better realizations from lac. The other differences are probably only due to fluctuations in the demand.

195. The increase in the expenditure is due to a necessary increase of establishment being sanctioned. Deducting the outstanding of the previous year (Rs. 2,197) recovered in 1879-80, the surplus in 1880-81 is Rs. 1,120 less than that of the former year ; but as measures for the preservation of the forest have been on a fairly large scale, the result of the year's transaction must be considered satisfactory.

DAMOH DIVISION.

196. The intended reservation of certain forest plots with an aggregate area of 698 acres has been notified, but these have not yet been included in reserved forests, the area of which remains the same as at the close of 1879-80.

Protection.

197. The District Officer reports 48 cases of breach of Forest law in which 88 persons were involved. In these cases prosecution was resorted to and the conviction of 82 persons in 43 cases obtained. The number of prosecutions is larger by 50 per cent than in the previous year, and it is said to be due to an attempt by people who refused to commute to take what they require from the forests without license. If there have been no other offences it must be admitted that the protection of the forest has been as complete as can be hoped for.

198. Major Miller, the present Deputy Commissioner, notes that forest fires have been less prevalent than in the previous year, but, at the same time, remarks that this can only be regarded as an ordinary fluctuation, and is not due to any special cause.

Conservation and improvement.

199. The District report indicates that certain blocks of forest are closed against cutting, that they have also been protected from fire, and that in some of them grazing has not been allowed.

200. The small plantings of previous years have been almost entirely destroyed by the frosts of 1878-79 and 1879-80, and sowing of teak and other species made during the year under report did not prove successful. Bambus raised in nursery in the previous year were planted out on an area of 15 acres, and are said to be thriving. The expenditure of the year on planting was Rs. 319-8-0.

Planting in Kishun Talao reserve.

201. The following is a comparative statement of the receipts and charges for the two past years :—

Receipts and charges.

		1879-80. Rs.	1880-81. Rs.
Receipts	..	43,330	52,098
Charges	...	11,114*	11,035
Surplus	...	32,216	41,063

202. The revenue from all sources has steadily increased, which is mainly due to the fuller operation of the change referred to in paragraph 233 of the previous year's report, which has been modified only by permitting wood for agricultural implements to be taken on payment of an extra 3 annas per house. Closer supervision rendered possible by increased establishment only entertained for part of the previous year has doubtless tended to increase the receipts, especially from grazing, while the arrangement made direct with lac producers has materially increased the income from this source. In the case of bambus alone can it be said that the receipts have been increased by keeping open a larger area for felling.

203. The receipts from minor produce now form an important item, amounting to nearly to Rs. 12,000, most of which is derived from lac.

204. Deducting the amount of Rs. 313 on account of refunds paid in the preceding year, the charges for 1880-81 show a slight increase, due to the increase of establishment sanctioned during 1879-80, and which has affected the charges for the whole of 1880-81.

SEONI DIVISION.

205. The area of the reserves has undergone no change. It is proposed to increase it by the reservation of those tracts still known as unreserved forest, but a notification has not yet been issued.

Area.

206. In 26 cases 54 persons were prosecuted for breach of Forest rules and in 20 cases 35 persons were convicted. From the return it appears that no other offences came to light.

Breach of Forest law.

207. The Divisional forest officer reports that nearly all of the areas are divided into circles and these again into compartments to be worked in rotation, thus giving rest and protection to a considerable portion of the forests which must thereby be closed.

Conservation.

Yield.

208. The following statement gives the yield of the reserves :—

	No.	Cart-load.	Yokes.	Head-load.
Poles	30,706	...	...	...
Building wood	...	663	97	12,519
Wood for fencing	...	90	...	2,923
Fuel	...	5,182	...	28,162
Charcoal	...	541	...	7,018
Bambus	3,69,470	1,040	...	18,171
Grass	...	1,683	...	11,820

209. The number of cattle grazed was as follows:—

Bullocks	...	165,809
Buffaloes	...	25,050
Goats	...	12,601

Receipts and charges.

210. The following statement shows the receipts and charges as compared with those of the previous year :—

		1879-80. Rs.	1880-81. Rs.
Receipts	...	50,143	48,395
Charges	...	11,302	11,487
Surplus	..	38,841	36,908

211. In both years the proportion of control charges debited to the 2nd class reserves is only one-third of the total for the division, two-thirds having been debited to the 1st class reserves. The Commissioner considers this a fair proportion, though from my experience I should say the proportion might be more properly reversed.

212. With the exception of miscellaneous revenue the receipts under all heads have increased or remained the same as in the previous year. Under miscellaneous revenue there is a falling off of about Rs. 2,800, due to some receipts from squatter cultivation in the forest having been credited in 1879-80 to "Forests." On the whole the revenue shows a tendency to increase.

213. The Sconi division has been unfortunate in having during the year under report no less than four different Divisional officers. Two of the transfers were wholly unavoidable, the other two were made because the officers moved had not time to acquire that local knowledge that would have rendered their services specially useful in the division, and no other arrangement could be made without transferring officers who from having become thoroughly acquainted with their charges were specially useful in the posts held by them.

MANDLA DIVISION.

Area and boundaries.

214. By Notification No. 2112 of 9th June 1880, the area of the 2nd class reserves was reduced by 4,700 acres, leaving at the close of the year an area of 2188·275 square miles.

215. From the district report it may be inferred that all the forest blocks are demarcated. Considering that but a few years since considerable difficulty was supposed to be experienced in identifying the Government forest this must be regarded as satisfactory.

Breach of forest law.

216. In 463 cases 2,921 persons were detected in the commission of breach of Forest rules. In 266 cases 291 persons were prosecuted, and in 248 cases 266 persons were convicted. In 167 cases 2,203 persons compounded, and at the close of the year 30 cases in

which 427 persons were concerned were pending. The Deputy Commissioner explains that to ensure greater regard for the forest rules a few more prosecutions were considered necessary, and the Commissioner remarks that the total number is not excessive.

217. It is reported that "dhya" cultivation has been almost entirely suppressed and measures are being adopted to locate the "Baigas" as cultivators with the plough in suitable spots, some of which it is said have already proved successful. It is also reported that with much pains and trouble Colonel Brooke, the Deputy Commissioner, has made a complete examination of his forests, and is now preparing a map in which the areas within which cultivation may not be admitted will be clearly defined.

218. Hurra was again collected by Government agency. The crop was bad, and the result is not yet known. The previous year's gathering gave a profit of Rs. 1,700 against Rs. 1,000, the highest sum realized by lease of the right to collect. It must be admitted that Rs. 700 is not a large increase, considering the trouble and labour entailed by collection, but the experiment has not yet been fairly tested, as both in the past and in the previous year the crop in Mandla has been decidedly bad.

Receipts and charges.

219. The receipts and charges for the past two years are as follows:—

		1870-80 Rs.	1810-81. Rs.
Receipts	...	96,157	76,433
Charges	...	10,297	10,468
Surplus	...	85,860	65,965

The gross receipts were Rs. 19,724, and the net receipts Rs. 19,895, less than in the previous year. It is now, however, explained that in the receipts for 1879-80 were included outstandings on account of 1878-79 to the amount of Rs. 17,017, while of the past year's receipts only Rs. 784 were on account of the preceding year. On account of the year, therefore, the gross decrease was Rs. 3,491 and the net decrease Rs. 3,662. The difference between the two is trifling, and calls for no explanation.

220. The great decrease in gross receipts has been under the head of grazing; under almost all other heads, especially under those of minor produce and commutation there has been an increase. Striking out the receipts on account of the previous year, the grazing dues for 1879-80 amounted to Rs. 63,413, those for 1880-81 to Rs. 51,806, thus giving a decrease of Rs. 11,607. It is said that this decrease is due to scarcity of water in the Government forests, but I am compelled to doubt the correctness of the supposition. It seems more probable that the prevalence of cattle disease has deterred many owners of stock from taking their cattle to places frequented by stock from all parts of the Provinces.

221. In connection with the short water-supply above referred to the Deputy Commissioner notes that plans have been drawn up for the construction of a large reservoir to supply sufficient water for 20,000 head of cattle. Whether or not the undertaking of this work will be expedient, I am not at present prepared to state, but if it can be justified it will be on the ground that water is wanted, and consequently its effect will be to cause large numbers of cattle to congregate in one place, which is most undesirable.

222. In concluding his remarks on the District Forest report the Commissioner writes—

> "Colonel Brooke has, I consider, done good work, and has looked well after the administration of his forests."

HOSHANGABAD DIVISION.

223. The area of the reserves is less than at the close of the previous year by 4,385 acres, which area has been alienated, and by Notification No. 3430 of 16th September 1880 ceased to form part of the reserves.

Area.

224. The number of offences detected was 427, in which 459 persons were concerned. In 5 cases only was prosecution resorted to, and in these cases the 7 persons accused were convicted. In the remaining 422 cases the offenders were allowed to compound.

Protection.

225. In the general system of management there has been no change, while the method of levying dues and the rates have remained the same as in the previous year.

General system of management.

226. On this subject I may quote the following extract from the Deputy Commissioner's remarks:—

Requirements of the people.

"Complaints about the difficulty of getting wood for all purposes have been many and loud, from that part of the district which lies between the railway and the river. It is only within the last 10 or 20 years that this tract of country has become denuded of wood and broken up for cultivation, and it is only within the last few years that the scarcity of wood there has grown into an actual dearth, and the pressure being a new sensation, is felt more now, than it will be when people get used to the necessity of sending 12 or 20 miles for the wood they require. Major Ricketts had the subject under consideration when he left, and I will give it my early attention, though I am not hopeful of being able to do much."

227. It appears to me, however, that if there be any foundation for the complaints referred to they cannot be attributed to the cause assigned, for, except to the west of Harda and Handia in the tract of country lying between the Railway and the Nerbudda. there has not been at any time within the last 20 years any forest land the breaking up of which would have had any appreciable effect on the supply of wood, nor do I think that in India, agricultural communities would consider 20 miles a long distance to have to go for the supply of their wants in forest produce.

228. What really has been going on is that, under the system of charging for produce without proper regard to its value, the removal of the more valuable woods except a few reserved kinds has been encouraged, and such woods have year by year become scarcer and more difficult to obtain. It is the result of this system which to my knowledge is most being felt by the well-to-do cultivators of the tracts referred to, and it is not improbable that they who believe in forests being inexhaustible, may, in ignorance of the real cause, have attributed it to the disappearance of traditional forests.

229. The subject was one brought to notice by me when the revision of rates took place three years since, and I have recently addressed the Commissioner of the division on the subject. It must, however, be understood that without some sacrifice of public convenience progress in the wrong direction cannot be arrested.

230. The quantity of produce removed from the 2nd class reserves is shown in the following statement:—

	Number.	Cart load.		Jotis.	Buffalo, donkey and pony load.	Head load.
		2 bullock.	4 bullock.			
Jungle wood sleepers ...	60	...	...	...	...	...
Building wood, pieces ...	1,120	3,004	112	630	55	10,359
Firewood ..	...	24,159	288	...	1,282	22,408
Charcoal ...	...	94	1	...	2	3,286
Bambus ...	357,497	...	...	...	...	224
Bambu mats, baskets, &c. ...	...	...	...	...	...	3,091
Grass ...	...	1,264	79	...	1,234	3,662

231. The number of animals grazed was as follows:—

Camels	...	125
Buffaloes	...	27,413
Cows and bullocks	...	2,04,014
Sheep and goats	...	41,862

Receipts and charges.

232. As compared with the previous year the receipts and charges stand thus:—

		1879-80.	1880-81.
		Rs.	Rs.
Receipts	...	47,393	42,516
Charges	...	18,554	16,400
Surplus	...	28,839	26,116

233. In 1879-80 there was revenue to the amount of Rs. 3,350 and expenditure to the amount of Rs. 2,925, resulting from timber operations, under which head there was neither revenue nor expenditure in 1880-81. For 1879-80 the ordinary receipts amounted to Rs. 44,034 and the ordinary expenditure to Rs. 15,629. While therefore the ordinary receipts have fallen by Rs. 1,518, the ordinary expenditure has risen by Rs. 771. The increase in the charges is not great, and represents a difference that might at any time occur from the prevalence or otherwise of vacancies in the temporary establishment. Under receipts the difference may be attributed to smaller realization from compounding offences against the rules for grazing. There have been fluctuations under different heads, but on the whole the revenue has been steady. Had it not been for the Census duties which devolved on the Forest establishment when forest duties demanded their closest attention, the receipts would probably have been larger.

NIMAR DIVISION.

Area.

234. The area of the 2nd class reserves underwent no change during the year under report. Owing to some disputes regarding boundaries which from various causes it was not possible to dispose of during the past year, none of the areas selected as permanent reserves have yet been transferred from the 2nd class reserves.

Breach of forest rules.

235. There were 153 prosecutions for breach of Forest rules, involving 248 persons. In 145 cases 240 persons were convicted. In 113 other cases involving 175 persons money compensation was accepted.

General system of management.

236. In the general system of management there was no change during 1880-81, but since the close of the year arrangements have been made to reduce the amount of routine work that fell to the lot of the Divisional officer and has hitherto absorbed far too much of his time.

237. In the selection of limits separating the more important forests from those areas that may advantageously be given up to the plough no progress has been made, owing mainly to the unavoidable transfers of officers. This is now the most important work before the department in this division, and until it has been accomplished it must be admitted that forest administration is not on a satisfactory footing, the conservation of the whole forest area being an impossibility, and moreover neither necessary nor desirable.

Yield.

238. The following statement gives the yield of the forests for the past year :—

	No.	Cart load.		Buffalo, bullock, and donkey load.	Head load.
		2 bullocks.	4 bullocks.		
Timber	...	627	...	...	3,832
Wood for building	...	340	...	5	135
Wood for agricultural implements ...	...	404	...	..	1,270
Dhaora axles	...	277	...	3	861
Firewood and charcoal ...	...	5,665	9	1,575	9,746
Bambus	3,35,566	...	...	...	...
Grass	...	3,199	1	2,705	10,621

239. The number of cattle grazed was as follows :—

Buffaloes	..	30,053
Cows and bullocks	...	1,27,087
Goats and sheep	...	7,312

Receipts and charges.

240. The receipts and charges for the past two years have been—

		1879-80. Rs.	1880-81. Rs.
Receipts	...	37,873	40,233
Charges	...	17,883	18,884
Surplus	...	19,990	21,349

In the expenditure of both years the general charges other than "Direction" have been apportioned with as much accuracy as possible. The cost of temporary establishment was higher, but the proportion of the Divisional officer's pay debitable to the forests was less.

241. Of the increase under receipts the amount of Rs. 800 is accounted for by excess under fines and forfeitures. The balance is merely under grazing and grass, and it is partly counterbalanced by a decrease under other heads. The increase in the receipts under grazing and grass is probably due to the general want of fodder at the close of the hot season of 1878, and the late and exceptionally short rainfall, which created a pressing demand for fodder during the months of June, July, and August.

BETUL DIVISION.

Area and boundaries.

242. The area of the reserves is still 5,45,452 acres. The demarcation of these forests is not in a satisfactory state, and arrangements are being made for improving it.

Protection.

243. The Divisional officer reports that the establishment is insufficient for protective purposes. That protection is far from being complete is a point on which there can be no difference of opinion, but complete protection cannot be expected if the boundaries are not well defined.

Breach of Forest rules.

244. In nine cases 13 persons were prosecuted and convicted for breach of Forest rules. The return shows that no offences were compounded, but this can scarcely be correct.

245. The southern forests on the Berar border are still closed against the cutting of bambus, and nowhere in the reserves has the felling of trees of the reserved kinds been permitted.

246. The collection of "hurra" by Government agency was attempted, but the crop failed almost entirely, and the Deputy Commissioner states that the undertaking resulted in a dead loss.

Receipts and charges.

247. The receipts and charges for the past two years have been as follows :—

		1879-80. Rs.	1880-81. Rs.
Receipts	...	30,970	32,914
Charges	...	15,145	8,402
Surplus	...	15,825	24,512

248. The expenditure is less, owing to the absence for some time of a Divisional Forest Officer, and the officer who held charge for part of the year drawing a lower salary. Under receipts there is an increase of Rs. 2,000, which brings the income up to that of 1878-79. The cause of the increase has not been explained by the Divisional officer.

NARSINGHPUR DIVISION.

Area.

249. The area of the reserves is unchanged, amounting only to 1,23,712 acres. It is reported that several claims to proprietary right in small areas within the reserves are now under consideration. It is obvious that with so small an area available for a permanent supply, Government cannot afford to part with more than is absolutely necessary to meet established claims, and it is hoped that this will be kept in mind and that the acquisition of fresh rights will be guarded against, at least until permanent reserves have been selected.

Breach of Forest law.

250. The return shows that in four cases 5 persons were prosecuted and convicted for unauthorized grazing and appropriation of forest produce. These cases were not tried under the Forest Act, and must therefore have been taken up under the Penal Code. No other offences were reported. The inference is either that fear of the penalties that may be inflicted under the Penal Code has had a salutary effect in checking offences, that protection is incomplete, or that in the present the wants of the people can be so easily supplied from other sources that the Government forests are not yet much required for the purpose. Probably the small number of offences reported is more or less attributable to each of these causes.

Conservation.

251. Under the head of conservation there is nothing to record. While as a whole the forests have not been heavily drawn upon, it is reported that some of them have been worked to excess. The measures that should be adopted for the restoration of accessible areas that have been overworked will be considered during the coming season.

Receipts and charges.

252. The receipts and charges for the past two years are given below :—

			1879-80. Rs.	1880-81. Rs.
Receipts	...	..	9,896	12,154
Charges	...	...	3,077	3,280
Surplus		...	6,819	8,874

253. The realizations for 1879-80 were kept down by a change in the revenue system. The past year's receipts were a little below those of 1878-79 and correspond with the realizations of 1877-78. The slight difference in the expenditure of the two past years is partly due to refunds.

CHHINDWARA DIVISION.

Area and boundaries.

254. The area of the reserves is unaltered. From the Deputy Commissioner's remarks I am led to believe that the boundaries of the forests are not as well defined as might be inferred from paragraph 272 of the report for 1879-80. The matter is receiving attention, but difficulty is experienced from the want of competent and trustworthy surveyors.

Forest offences.

255. There were reported 484 cases of breach of Forest rules, the offenders in 10 cases remaining undetected. In 11 cases 17 persons were prosecuted and the conviction of 14 persons in 9 cases obtained. In 463 cases the 765 persons concerned were permitted to compound.

General system of management.

256. In the general system of management there has been no change worthy of note, and the Deputy Commissioner remarks that if the absence of complaints may be taken as proof of popularity, then the present system may be fairly judged to be popular. As, however, no arrangement that does not permit unrestricted use of the forests without payment is ever likely to be popular, it can only be a less degree of disfavour that can be secured by any rational system of management.

257. The district report contains reference to the closing against cutting of 18 blocks hitherto drawn on from the Nagpur country, which it is said are to be re-opened after 5 years, when other blocks will be closed.

258. The expediency of encouraging the extension of squatter cultivation has I understand been suggested by the Commissioner. In this matter nothing has been done, and as in the Government forests there is but little land suitable for permanent cultivation and the Deputy Commissioner notes that there is not that pressure of population to render it difficult to obtain malguzari land to bring under the plough, the encouragement of squatter cultivation in the Government forests appears scarcely called for.

Receipts and charges.

259. Compared with those of the previous year the receipts and charges are :—

	1879 80. Rs.	1880-81. Rs.
Receipts	26,661	27,415
Charges	12,601	7,851
Surplus ...	14,060	19,564

260. The difference in the expenditure is due to the division being without a Forest officer of the superior staff during 1880-81. In the receipts there has been a decrease in revenue from timber of Rs. 538, and an increase in receipts from grazing and minor produce of Rs. 616 and Rs. 659 respectively. The decrease is said to be due to unrestricted felling in private forests. The increase under grazing is attributed to a closer watch by the Forest establishment, but may be the result of a decrease elsewhere. The increase under minor produce is due to a good mohwa crop, for which there was a good demand, and to the extension of Katha manufacture in the Government forests.

RAIPUR, BILASPUR, AND SAMBALPUR DIVISIONS.

261. Regarding the forest administration in these districts, I here give the Commissioner's own remarks :—

"2. The Government forests to be noticed are the 2nd class reserves, and their areas were as in the previous year, namely :—

Raipur	...	...	...	1,376 square miles.
Bilaspur	...	...	...	649 "
Sambalpur	...	...	...	715 "

Demarcation of Government forests.

"3. The demarcation of the Government forests in the Raipur district has not been referred to in the district report, but in Bilaspur, the Deputy Commissioner states the boundary marks are in good order; and in Sambalpur 20 forest plots were demarcated during the year, and the work of demarcation is now approaching completion. The demarcation has been by posts, and these posts the Deputy Commissioner writes 'have been made of solid sal wood to ensure durability, and the portions put under ground have been scorched to prevent their destruction by white ants. Doubtless single stones would have been better.'

System of management.

"4. As stated in my letter No. 3685, dated 7th July 1880, no plan of forest management can be successful in Chhattisgarh which does not treat Chhattisgarh as a whole and deal with all the forests therein, whether khalsa, or zamindari, on one and the same system. The Administration has the power to lay down such a system for the Feudatory chiefs by their acknowledgments of fealty, and the Non-feudatory zamindars by their patent are bound to carry out any forest regulations the Local Government may prescribe, and consequently there is no obstacle to introducing a full and comprehensive scheme for the whole of the forests of Chhattisgarh. The importance of such a scheme to the great tracts under cultivation can hardly be over-estimated, and district officers are not slow to realize the urgency of the question, but hampered as they are with other duties they have not the time to make the inspections and to work out the details which are absolutely necessary if a comprehensive scheme is to be framed and efficiently given effect. Therefore it is that I have ventured to press the urgent claims of this division for the permanent services of a Forest officer, and I would add that every year renders the necessity for those services more and mor apparent.

"In the Raipur district, however, the prevalence of grave abuses rendered it impossible to wait for the comprehensive scheme I suggested, and in my letter No. 3670 of 17th instant, forwarded through your office, I have submitted proposals drawn up by Colonel Ward, for introducing into the khalsa of Raipur the system in force in Saugor. One great difficulty which exists in Raipur and does not exist in Saugor is that of dealing with produce in transit from private forests, and this difficulty I hope has been in some degree solved by the arrangements sketched in the 10th paragraph of the letter above referred to, while under the rules proposed by Colonel Ward the forest establishment will be less uncontrolled than at present. Still, even this limited scheme will not work satisfactorily unless the Deputy Commissioner has a Forest officer to assist him, for the distances are great, the areas large, and the conflicting interests numerous."

"In the Bilaspur district the system formerly in force remained unaltered during the year. It is defective in many points, but it presses much less hardly on the people than does the Raipur system, because in Bilaspur there is little interference with produce in transit from private forests, and the rates at which such produce can be obtained are consequently much lower.

"In my report for 1879-80 I mentioned that I had asked the Deputy Commissioner of Sambalpur to adopt certain modifications which I hoped would have the effect of removing the reasonable causes of discontent on the part of the people against the existing forest system, and would at the same time protect the forests against wasteful cutting, but I gather from the Deputy Commissioner's report that those modifications have either not been carried out, or only carried out in part. The reason given is that the press of judicial work prevented the Deputy Commissioner "going thoroughly into the subject of forest administration," and I trust that during the current year the subject will be dealt with in the manner its importance deserves.

Gross receipts.

"5. Excluding the fixed forest assessment paid by Zamindars the gross collections in 1880-81 and the previous year were:—

	1879-80. Rs.	1880-81. Rs.	Difference. Rs.
Raipur	51,308	52,912	+ 1,604
Bilaspur	14,173	13,759	— 414
Sambalpur	9,726	7,780	— 1,946

"The large decrease in Sambalpur is remarkable, and is ascribed by the Deputy Commissioner to three causes, namely:—

(1). Decreased value of minor forest produce.
(2). Increased resort to private forests.
(3). Temporary withdrawal of the forest establishment for employment on Census duties and consequent increase of illicit cutting.

"In Bilaspur the decrease was under grazing licenses, and this decrease the Deputy Commissioner explains arose from the great mortality which occurred during the year among the cattle of the district.

Cost of establishment and contingencies.

"6. The cost of establishment and contingencies in the several districts was—

	1879-80. Rs.	1880-81. Rs.	Increase. Rs.
Raipur	6,695	7,032	37
Bilaspur	2,306	2,400	94
Sambalpur	2,880	4,416	1,536

being in the following proportions to the gross receipts collected:—

	1879-80.	1880-81.	Increase.
Raipur	12·7 per cent.	13·3 per cent.	+ ·6 per cent.
Bilaspur	16·2 "	17·4 "	+ 1·2 "
Sambalpur	29·6 "	56·7 "	+27·1 "

"It is the reverse of satisfactory to find in the Sambalpur district that the cost of establishment and contingencies absorbed more than half the gross receipts of the year, and there seems no good reason why Sambalpur with only 66 square miles of Government forest in excess of Bilaspur should have spent on establishment and contingencies Rs. 2,016 more than Bilaspur:—

Net revenue.

"7. The net revenue realized in the three districts was:—

	1879-80. Rs.	1880-81. Rs.	Difference. Rs.
Raipur ...	44,613	45,880	+1,267
Bilaspur ...	11,867	11,359	— 508
Sambalpur ...	6,846	3,364	—3,482

"Thus Bilaspur with a smaller forest area than Sambalpur and a much easier forest system realized three times the net income realized in Sambalpur. Raipur I do not bring into the comparison, because I am unable to say how far the taxation has been restricted to duty on produce of the Government forests.

Forest prosecutions.

"8. The number of persons prosecuted for Forest offences during the year was:—

	1879-80.	1880-81.	Difference.
Raipur ...	47	326	+279
Bilaspur ...	...	13	+ 13
Sambalpur ...	1,015	260	—755

"There was thus a great and satisfactory decrease in the number of prosecutions in the Sambalpur district, but looking to the areas of the Government forests in the several districts the number of those prosecutions was proportionately still highest in the Sambalpur district.

"I have asked the Deputy Commissioners in future reports to state the number of persons in regard to whom forest offences were compounded during the year.

Forest assessments of Raipur Zamindaries.

"9. Some progress has been made since the close of 1880-81 in the work of revising the forest assessments of the Raipur Zamindaries.

"10. During the year the attention of the Deputy Commissioners was asked to the following points of forest management:—

Subjects requiring attention.

(1). Dividing the forests into blocks and working the blocks by rotation.
(2). Protecting the more valuable blocks from fire and cattle.
(3). Sowing vacant areas broad-cast with suitable seed.
(4). Establishing Government depots for the sale, at moderate prices, of river borne timber, &c.
(5). Inducing village communities to form for each village a village reserve of pallas and other hardy jungle trees. I fear, however, that little has yet been done to carry out these suggestions, and I can only hope that the current year may show some results under these heads."

262. The method of demarcation adopted in Sambalpur is that agreed to by me before sanctioning the estimate. Single stones are not distinctive, and on the whole are not found satisfactory except perhaps as intermediate marks.

263. With all deference to the Commissioner's views I am unable to concur with him in the opinion expressed in his paragraph 4. I would submit that the good administration of Zamindari forests is by no means essential to the proper management of those belonging to the State; and however desirable the good administration of Zamindari forests may be, the first duty of the department is to do what is needful for those which belong to Government.

The first step in the right direction in Chhattisgarh must be the selection of the more accessible and productive forests to be brought under strict conservation. Any attempt at introducing proper conservation over the whole area at once must necessarily lead to disappointment. When a Forest officer can be spared for Chhattisgarh his first and most important duty should be the selection as above indicated of the forest areas most suitable for permanent reserves.

264. As regards the small surplus in Sambalpur, it may be said that some of the forests being really well situated with reference to the market, to prevent the unauthorized use of the forests, the employment of a stronger establishment would probably in a few years result in the realization of a fair revenue and a satisfactory surplus.

CHAPTER IV.

General Remarks.

265. Brief reference may here be made to experiments in raising forest species artificially at Telunkheri.

Just before the rains of 1880 a piece of low lying swampy land 1·85 acre in extent, covered with a crop of densely matted grass, wast aken in hand. It was lined off at 7·5 feet, and between the lines trenches were dug, the clods and turf removed being inverted and placed on the undisturbed space between the trenches, till the difference in level between the bottom of the trenches and the top of the ridges was about 2 feet. At the commencement of the rains bambus (*Dendrocalamus strictus*) about 18 inches in height were planted at intervals of 7·5 feet on the ridges, and here and there, in lieu of bambu clumps a few mhaagony trees that were available were put out. On the banks between the plants was sown "tur" or "arhur," the large variety of castor-oil plant, and cotton. The entire crop came on vigorously. Both bambu and mahogany benefited by the side cover of the "tur" and cotton and the shade afforded by the lofty castor-oil plants. The combination served to keep the ground in good order and perfectly clean, rendering but one weeding necessary, notwithstanding the previous foulness of the soil. The total cost of this experiment was Rs. 55-3-11 including all charges, and a yield of 2½ khandis of tur and 2¼ khandis of castor was obtained and sold for Rs. 41-13-6, thus leaving a balance against this experimental plot at the end of the 1st year of Rs. 13-6-5. It may here be noted that the cotton sown was of an introduced variety which proved unsuited to this part of the Provinces; it flowered freely but set no fruit, and the inference

is that, had one of the better indigenous varieties been sown the receipts would have exceeded the expenditure. A second but light crop of tur and two more crops of castor are expected from this area, after which the forest growth will, judging from its appearance, have suppressed every thing else.

266. On the dry trap hills round the garden were planted out 15'×15' 1,414 bambus, of which 88 only failed; a small number of teak, anjun and other trees were also put out.

267. The experimental plantings of previous years continue to afford more and more abundant evidence of the advantage of high cultivation, and to show that the start thus given to young trees during the first year or two of their existence vastly accelerates the after-growth at any rate for a very lengthened period. How to cover the first outlay on high cultivation is the problem to be solved, and the experiment of last year is only one of the many experiments necessary for this purpose.

268. In the planting up of poor and bare trap hills, anjun (*Hardwickia binata*) and tinnus (*Ougeinia dalbergioides*) have answered well, and at certain stages of growth they transplant easily.

269. Among bambus thus planted out on thoroughly exposed slopes there were a good many deaths, but where watered they have done well, notwithstanding the absence of cover, so prejudicial to this species in the early stage of growth.

270. A series of other experiments are also being carried out with various indigenous species to test their suitability for different purposes and different methods of treatment, and the cultivation of exotics hereinafter referred to has been continued.

271. The total outlay on the Telunkheri estate was Rs. 3,012, of which about Rs. 1,600 is on account of improvements, that will pay in course of time, and experiments with exotics and indigenous species. The receipts amounted to Rs. 1,496.

272 Regarding other forest gardens there is nothing special to be recorded in connection with the past year. They have been used for the experiments with exotics next referred to.

273. There were no further experiments with any of the varieties of Eucalyptus. A few specimens of *Eucalyptus dichromofolia* planted at Telunkheri on a red soil derived from trap, though not very vigorous, continue to resist the influence of the hot weather. On the same soil a specimen of *Eucalyptus crebra*, a species which failed entirely on black soil, is doing well. *Eucalyptus saligna*, though it grew rapidly, suffered during the hot season, when the finest specimens were taken off. On the sandy soils in Chanda the *Eucalyptus saligna* has continued to grow well, but such have been the depredations of white ants that the successful cultivation of this species in this portion of the Province can scarcely be hoped for. Out of the splendid stock of last year, but few trees now remain. In Saugor with this species the result has not been favourable, only one tree being reported as doing well.

The two oldest mahogany trees at Telunkheri, which were grown under conditions resembling that of open overgreen forest on moist soil, continue to thrive; those planted out in lines with sissu are less promissing, and their growth of late has been much retarded. The backward growth of those trees is attributed to the small development of crown whereby the bark has suffered from excessive exposure. In the Chanda division the trees continue to thrive.

274. The "Mesquit bean" must be regarded as a failure, though a number of plants continue to live.

275. The *Pithecolobium Saman* continues to thrive at Nagpur, Ahiri, Chanda and Rukur, above the Korai ghat; its growth has been slowest in Nagpur and most luxuriant at Rukur. It is worthy of note that in the Maharaj Bagh there is a tree of this species believed to be about 10 years old, but it has not yet seeded.

276. The Carob has failed in Nagpur, at Rukur it is thriving well, and it is said to be fairly successful at Saugor.

277. In a field at Telunkheri, the soil of which is derived from the washing of a nodular trap hill, an interesting experiment in the transplanting of sandal-wood was carried out by Mr. Hooper, Assistant Conservator; the trees put out varied in height from 18 inches to 3½ feet, the larger transplants had at the time of transplanting a better development of crown and succeeded best. All the plants suffered from sun-burn, but it is obvious that this could be prevented by interlining with tur or some such crop.

278. During the year under report the difficulty regarding office establishments, referred to in paragraph 301 of the report for 1879-80, has continued to be felt, though to relieve the strain in the Chanda division, where the work was heaviest, a temporary post was sanctioned. What is really necessary is, that each Divisional officer should have one well paid and trustworthy clerk at his disposal, but of this the present allotment for office establishment does not admit. This is a subject which must now be separately taken up.

279. Of the Deputy Conservators, I would mention Mr. Thompson, Captain Losack, and Mr. Whittall. Mr. Thompson returned from special duty in October and resumed charge of the Chanda division, the important duties in connection with which he has since conducted with his usual energy and ability. Captain Losack has been successful in almost all his undertakings in connection with the Mandla and Jubbulpore divisions of which he has held charge; and in his efforts to bring about conditions, by which the working of the Mandla division will be rendered more profitable, has rendered excellent service. Mr. Whittall joined on transfer from British Burmah in July last and has proved himself a zealous and able officer.

280. Of the Assistant Conservators I would first mention Mr. Foster, since promoted to officiate as Deputy Conservator, and Mr. Hooper. In all the undertakings connected with his charge Mr. Foster has been most successful. As a Divisional officer, and as an Assistant in my office, Mr. Hooper has earned my fullest approbation for the zealous and efficient manner in which he has conducted his duties.

281. Mr. Fernandez's selection and transfer to the School circle in the North-Western Provinces is sufficient testimony of the estimation in which this officer's services are held. It must be acknowledged that his transfer, which took place at the commencement of the working season, has been a loss to the department in these Provinces.

282. Of the Sub-Assistant Conservators, I would specially bring to notice Mr. G. F. Taylor, Officiating Assistant Conservator. He held charge of the Aheri Sub-division including the saw mills, the duties in connection with which he conducted to my entire satisfaction.

283. Of the Forest Rangers, Mahomed Ghouse and Chunder Kumar Chatterji first merit notice. The latter was nominated as a probationer in September last and sent to the Forest school. Mahomed Ghouse held charge of two divisions for part of the year, and proved that the confidence thus reposed in him was not misplaced. Forest Ranger Madho Rao Pulnitkar has proved himself a zealous and thoroughly efficient Forest subordinate.

The following Forest Rangers have done good service and merit notice:—

Forest Ranger	Mahomed Kadur Baksh.
Do.	Mahomed Suliman.
Do.	Mahomed Khan.
Do.	Ganpat Rao.
Do.	Vitthal Waman Pagi.

J. C. DOVETON,

Conservator of Forests.

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STATEMENTS.

Annual Form No. 45.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1880-81.

Division or Range.	Name of Forest and Civil District or Territory.	Area on 1st April 1880.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1881.		No. and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
	Bilaspur District.										
Direction Division ...	Hathibari	3	2,123	...	...	...	...	3	2,123		
	Raipur District.										
	Kuntranala	6	3,548	...	...	...	...	6	3,548		
	Mandla District.										
	Jagmundal	38	24,503	...	...	...	...	38	24,503		
	Chuharigogarh	3	1,660	...	...	..	...	3	1,660		
	Banjar Valley	78	49,724	...	...	...	...	78	49,724		
	North Phen	10	6,435	...	...	...	...	10	6,435		
	South Phen	72	45,967	...	...	...	...	72	45,967		
Mandla Division ...	Motinala	3	1,658	.	...	...	...	3	1,658		
	Ahiri	3	2,150	...	...	...	..	3	2,150		
	Barela	11	7,153	...	...	...	...	11	7,153		
	Balaghat District.										
	Keolikapa	10	6,296	...	...	...	...	10	6,296		
	Topla	71	45,506	...	...	...	...	71	45,506		
	Jubbulpore District.										
Jubbulpore Division ...	Bijeragogarh	33	21,188	...	...	..	...	33	21,188		
	Damoh District.										
	Singrampur	10	6,555	...	...	...	...	10	6,555		

		Hoshangabad District.								
Hoshangabad Division	...	Rajaborari ...	...	258	1,61,645	...	...	...	...	258	1,61,645
		Bori ...	..	62	39,680	...	...	...	...	62	39,680
		Hoshangabad and Betul Districts.									
		Saonligarh ...	..	103	65,771	...	...	...	...	103	65,771
		Betul District.									
Betul Division	...	Bowergarh ...	..	118	75,520	...	...	...	...	118	75,520
		Khamapur ...	...	169	1,08,012	...	...	...	...	169	1,08,012
		Hoshangabad District.									
		Kalibheet ...	..	260	1,66,400	...	...	...	...	260	1,66,400
Nimar Division	...	*Nimar District.*									
		Punassa ...	...	143	91,720	...	...		...	143	91,720
		Chandgarh ...	..	96	61,440	...	...	...	...	96	61,440
		Khandwa ...		56	35,840	...	...	...	...	56	35,840
		Ahiri Zemindari in Chanda District.									
		Bimaram ..	..	19	12,296	...	...	...	...	19	12,296
Chanda Division	...	Mirkullu ...	..	13	8,479	...	...	...	...	13	8,479
		Chanda District.									
		Moharli ...	..	359	2,29,498	...	...	...	..	359	2,29,498
		Balaghat and Seoni Districts.									
		Sonawani ...	..								
		Korai ...	..								
Seoni Division	...	*Seoni and Nagpur Districts.*		373	2,38,754	...	...	..	...	373	2,38,754
		East Pench ...	..								
		Chhindwara and Nagpur Districts									
		West Pench ...	..	95	60,938	...	...	...	...	95	60,938
		Saugor District.									
		Garhakota ...	..	5	2,899	...	...	...	...	5	2,899
Saugor Division	...	Tigora ...	.	...	459	...	...	...	...	...	459
		Ranjir ...	..	17	11,036	...	...	...	...	17	11,036
		Ranipura ...	...	13	8,109	...	...	...	...	13	8,109
		Hathkho ...	...	31	19,492	...	...	...	...	31	19,492
		Total	...	2,535	16,22,454	...	...	...	...	2,535	16,22,454

Annual Form No. 45A.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 2nd Class Reserved Forests, 1880-81.

Division or Range.	Name of Forest.	Area on 1st April 1880.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1880.		No. and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
Jubbulpore Division..	Jubbulpore District.	329	210,587	8	*a* 5,432	...	...	337	216,019		*a.* Correction of area.
Hoshangabad „ ...	Hoshangabad „ ...	1,196	765,449	...	...	7	*b* 4,385	1,189	761,064	*b.* Chief Commissioner's Notification No. 3430, dated 16th September 1880.	*b.* Ceased to be reserved forests, *vide* Chief Commissioner's Notification No. 3430, dated 16th September 1880.
Betul „ ...	Betul „ ...	852	545,452	...	...	...	...	852	545,452		
Nimar „ ...	Nimar „ ...	1,509	965,486	...	...	...	...	1,509	965,486		
Chanda „ ...	Chanda „ ...	2,977	1,905,399	...	...	...	...	2,977	1,905,399		
Seoni „ ...	Seoni „ ...	554	354,306	...	..	...	...	554	354,306		
Saugor „ ...	Saugor „ ...	733	469,383	8	*c* 5,105	...	...	741	474,488	*c.* Chief Commissioner's Notification No. 4796, dated 23rd December 1880.	*c.* Reverted to Government.
Nagpur „ ..	Nagpur „ ...	390	249,785	...	..	...	...	390	249,785		
Civil Officers ...	Bhandara „ ...	551	352,640	...	...	...	...	551	352,640		
	Wardha „ ...	199	128,034	...	...	...	...	199	128,034		
	Balaghat „ ...	950	608,089	...	...	...	...	950	608,089		
	Damoh „ ...	834	534,743	...	...	...	...	834	534,743		
	Mandla „ ...	2,196	1,405,265	...	...	7	*d* 4,700	2,189	1,400,565	*d.* Chief Commissioner's Notification No. 2112, dated 9th June 1880. Do. No. 4604, dated 7th December 1880.	*d.* (1)—3,200 acres ceased to be a reserved forest. (2)—1,500 acres restored to the Bajpai family.
	Chhindwara „ ...	641	410,412	...	...	...	...	641	410,412		
	Narsinghpur „ ...	193	123,712	...	...	...	...	193	123,712		
	Raipur „ ...	1,377	881,280	...	...	...	...	1,377	881,280		
	Sambalpur „ ...	715	457,600	...	...	...	...	715	457,600		
	Bilaspur „ ...	649	415,360	...	...	...	...	649	415,360		
		16,848	10,782,991	16	10,537	14	9,085	16,850	10,784,443		

Annual Form No. 45 B.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Unreserved Forests, 1880-81.

Division or Range.	Name of Forest.	Area on 1st April 1880.		Added during the year.		Excluded or transferred to other heads.		Total on 31st March 1881.		No. and date of Notification of additions and transfers, &c.	Remarks.
		Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.	Square miles.	Acres.		
Seoni Division ...	Seoni District ...	196	125,587	...	...	...	...	196	1,25,587		
Nagpur Division ...	Nagpur District ...	8	5,000	...	...	...	...	8	5,000		
Chanda Division ...	Chanda District ..	...	114	.	...	...	...	...	114		
Civil Officer ...	Damoh District ...	21	13,715	1	*698	...	...	22	14,413		*Forest land, the right in which has reverted to Government.
Do. ...	Balaghat District ...	...	...	55	35,026	...	...	55	35,026		
	Total ...	225	144,416	56	35,724	...	...	281	180,140		

Form No. 47.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Forest tracts protected from fire during the dry season of 1881 (to accompany report for 1880-8

Division.	Forest tracts.	Up to 30th June 1880.						During dry season of 1881.									Total cost up to 30th June 1881.			Year when protection commenced.
		Area actually protected.	Total cost.					Area attempted to be protected.	Failures.	Actually protected.	Amount expended.									
		Acres.	Rs.	a.	p.			Acres.	Acres.	Acres.	Rs.	a.	p.				Rs.	a.	p.	
Direction	Hathibari ...	1,483	2,670	7	7			2,123	...	2,123	88	8	0				2,758	15	7	June 1
	Kuntranala ...	...	112	14	6			2,366	...	2,366	106	2	10				219	1	4	do. 1
Mandla	Banjar valley.	12,375	2,631	7	10			49,495	450	49,045	655	14	5				3,287	6	3	do. 1
	Motinala ...	1,659	230	12	1			1,659	..	1,659	48	14	10				279	10	11	do. 1
	Jagmundal ..	24,257	18,480	1	6			24,503	120	24,383	413	7	8				18,893	9	2	do. 1
	Chuharigogarh	1,653	4,674	3	0			1,661	...	1,661	68	14	11				4,743	1	11	do. 1
	Barela ...	...	1,254	12	7			7,153	...	7,153	120	3	4				1,374	15	11	do. 1
	Airi ...	2,150	19	0	9			2,150	3	2,147	20	5	0				39	5	9	do. 1
Jubbulpore ...	Singrampur ...	6,555	1,770	11	6			6,555	...	6,555	93	12	4				1,864	7	10	do. 1
	Bijeragogarh..	21,188	4,244	8	0			21,188	...	21,188	400	9	4				4,645	1	4	do. 1
Hoshangabad...	Rajaborari ..	99,845	2,394	6	1			102,720	80	1,02,640	509	1	3				2,903	7	4	do. 1
	Saonligarh ...	68,551	1,548	15	0			78,080	...	78,080	312	5	7				1,861	4	7	do. 1
	Bori ...	39,280	12,956	1	7			39,680	...	39,680	723	4	10				13,679	6	5	do. 1
Nimar ...	Kalibheet ...	62,000	782	3	1			62,080	7	62,073	289	13	9				1,072	0	10	do. 1
	Punasa ...	65,000	3,346	8	10			81,040	20,055	60,985	918	10	11				4,265	3	9	do. 1
	Chandgarh ...	48,885	864	5	2			61,440	30,520	30,920	382	7	7				1,246	12	9	do. 1
	Khandwa ...	35,068	1,789	6	2			35,840	80	35,760	968	3	3				2,757	9	5	do. 1
	Bainpura ...	600	42	0	0			600	...	600	8	9	0				50	9	0	do. 1
	Gunjari ..	3,500	111	0	0			3,500	...	3,500	37	0	0				148	0	0	do. 1
	Undria ...	3,100	23	4	3			3,100	10	3,090	32	14	0				56	2	3	do. 1
	Bhojwa & Beheria ...	1,820	22	0	0			2,000	...	2,000	34	8	0				56	8	6	do. 1
	Ajnal ...	15,000	57	13	9			15,000	...	15,000	37	4	0				95	1	9	do. 1
	Chaoria ..	...	...	...	..			170	...	170	10	14	0				10	14	0	do. 1
Betul ...	Bowergarh ...	23,360	2,639	1	5			38,720	960	37,760	599	8	6				3,238	9	11	do. 1
	Khamapur ...	5,120	427	10	3			16,000	...	16,000	191	6	3				619	0	6	do. 1
Chanda ..	Bemarum ...	12,296	8,936	6	5			12,296	...	12,296	1,342	3	3				10,278	9	8	do. 1
	Mirkullu ...	8,469	5,176	14	1			8,479	...	8,479	897	1	11				6,074	0	0	do. 1
	Taroba ...	25,619	6,518	4	2			25,619	1,147	24,472	1,124	5	10				7,642	10	0	do. 1
	Goverdhun ...	13,681	3,759	0	7			13,931	...	13,931	471	14	8				4,230	15	3	do. 1
Seoni ...	Korai ...	31,020	7,186	6	9			31,210	...	31,210	461	3	0				7,647	9	9	do. 1
	East Pench ..	31,380	3,523	9	9			42,580	...	42,580	554	9	5				4,078	3	2	do. 1
	Nagulwari ...	9,525	731	2	5			9,680	...	9,680	78	7	9				809	10	2	do. 1
	Paraspani ..	8,150	97	4	0			8,240	...	8,240	67	2	8				164	6	8	do. 1
	Sakata ...	10,020	125	8	0			10,020	...	10,020	260	9	6				386	1	6	do. 1
	Narhar ...	...	...	...	...			39,040	...	39,040	323	8	6				323	8	6	do. 1
Saugor...	Garhakota ...	2,899	86	1	1			2,899	...	2,899	15	2	0				101	3	1	do. 1
	Hathkho ...	10,598	1,362	11	4			10,598	...	10,598	276	11	4				1,639	6	8	do. 1
	Ranjir ..	1,987	50	9	8			1,987	...	1,987	13	3	6				63	13	2	do. 1
	Ranipura ..	2,720	96	14	10			2,720	...	2,720	113	2	7				210	1	5	do. 1
	Jalandhar ...	...	...	...	...			2,885	...	2,885	15	6	0				15	6	0	do. 1
Balaghat.	Pandratola ..	4,960	183	5	6			4,960	...	4,960	54	9	9				237	15	3	do. 1
Wardha..	Dhuga ...	25,600	61	9	3			25,600	...	25,600	216	6	0				277	15	3	do. 1
	Erjhar ...	11,693	7	0	0			12,813	1,120	11,693	25	2	6				32	2	6	do. 1
	Grand Total ..	753,066	1,00,996	6	9			924,380	54,552	8,69,828	13,383	2	3				1,14,379	9	0	

Charged in previous year	...	...	...	...	93,862 13 1
Charged in 1880-81	...	...	...	...	*13,452 15 11
Charged in 1881-82	...	...	...	...	7,063 12 0
				Total ...	1,14,379 9 0

* There was also expended Rs. 3 on Tigora reserve.

Annual Form No. 48.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest rules, 1880-81.

Forest Division and Civil District.	Injury to forests by fire.		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.			
									Prosecutions.		Convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1st Class Reserves.—												
Direction Division ...	...	...	...	...	...	..	...	...	...	...	...	...
Mandla „ ...	1	1	4	17	..	..	...	...	5	18	5	13
Jubbulpore „ ...	1	1	5	9	...	...	...	..	6	10	5	9
Hoshangabad „ ...	2	2	3	3	...	..	.	..	5	5	3	3
Betul „ ...	1	1	2	5	..	..	..	..	3	6	3	6
Nimar „ ...	1	1	1	4	..	..	...	...	2	5	1	3
Chanda „ ...	...	..	..	...	..	..	..	..	...	...	...	...
Seoni „ ...	1	1	4	8	.	..	..	..	5	9	4	7
Saugor „ ...	2	2	..	..	.	...	.	..	2	2	2	2
Total ...	9	9	19	40	...	...	...	..	28	55	23	48
2nd Class Reserves.												
Nagpur District ...	...	...	5	8	3	8	..	...	8	16	7	14
Bhandara „ ...	...	...	25	82	12	27	3	5	40	114	35	102
Chanda „ ...	...	..	65	142	..	...	..	..	65	142	61	131
Wardha „ ...	1	1	6	10	8	15	1	1	16	27	16	16
Balaghat „ ...	...	...	38	90	..	...	1	2	39	92	31	66
Jubbulpore „ ...	2	2	46	133	...	..	3	4	51	139	51	123
Saugor „ ...	3	3	14	29	7	11	8	17	32	60	22	43
Damoh „ ...	...	...	46	82	2	6	..	..	48	88	43	82
Seoni „ ...	..	...	24	45	1	8	1	1	26	54	20	35
Mandla „ ...	...	...	258	283	8	8	...	..	266	291	248	266
Betul „ ...	...	...	9	13	..	...	...	..	9	13	9	13
Chhindwara „ ...	...	...	9	15	1	1	1	1	11	17	9	14
Hoshangabad „ ...	...	...	5	7	.	...	...		5	7	5	7
Narsinghpur „ ...	...	...	3	4	1	1	..	..	4	5	4	5
Nimar „ ...	1	2	19	21	..	..	133	225	173	248	145	240
Raipur „ ...	...	...	72	323	1	3	...	..	73	326	66	308
Sambalpur „ ...	...	...	21	61	...	...	1	1	22	62	15	31
Bilaspur „ ...	...	...	4	6	...	...	4	8	8	14	5	10
Total ...	7	8	669	1,354	44	88	156	265	876	1,715	792	1,506
Grand Total ...	16	17	688	1,400	44	88	156	265	904	1,770	815	1,554

Annual Form No. 49.

FOREST DEPARTMENT,

Summary of Revenue of the different

Budget Heads Receipts.	Direction Division.	Balaghat District.	Betul Division.	Bhandara District.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forest by Government Agency:—				
a. Timber ...	.....	.....	94 10 0	.....
b. Firewood and Charcoal	.....	.....	.....	.....
c. Bambus ...	.....	.....	.....	.....
d. Sandal-wood ...	.....	.....	.....	.....
e. Grass and other Minor Produce ...	38 12 10	.....	5 0 0	.....
II.—Timber and other produce removed from the forest by consumers or purchasers:—	.....	12,223 11 10	.....	.....
a. Timber ...	0 13 0	1,929 0 3	4,003 3 3	801 11 3
b. Firewood and Charcoal	.....	3,684 2 5	4,245 3 3	12,727 9 11
c. Bambus	.....	1,157 2 11	4,017 6 7	515 12 5
d. Grazing and Fodder Grass	46 6 3	9,869 9 0	22,070 2 10	20,119 10 4
e. Other Minor Produce... ...	0 12 3	2,290 12 7	4,894 7 0	1,842 0 6
III.—Confiscated drift and waif wood ...	.....	318 11 10	3 0 0	328 10 5
IV.—Revenue from forests not managed by Government:				
a. Duty on Foreign Timber and other Forest Produce ...	.....	.....	.....	.....
b. Revenue from Shared and Private Forests...	.....	.....	.....	8,204 10 4
V.—Miscellaneous:—				
a. Fines and Forfeitures ...	.....	323 8 10	500 0 0	52 8 0
b. Refunds	.....	10 2 0	.....	.....
c. Other Sources	1,496 14 7	.....	1,998 15 9	26 2 0
Total Receipts ...	1,583 10 11	31,806 13 8	41,862 0 8	44,618 11 2
BUDGET HEADS.				
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government Agency:—				
a. Timber	.....	.....	.....	.....
b. Firewood and Charcoal ...	.....	.....	.....	.....
c. Bambus	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....
e. Grass and other Minor Produce ...	6 0 0	.....	69 1 3	.....
II.—Timber and other produce removed from the forests by consumers or purchasers ...	.....	6,495 1 10	7,269 14 4	6,674 7 5
III.—Confiscated, drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government:—				
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant:—				
a. Purchase of cattle	.....	.....	.....	.....
b. Feed and keep of cattle ...	715 8 9	.....	18 1 8	.....
c. Stores, tools and plant ...	142 11 0	.....	.....	.....

[*Prescribed.*]

CENTRAL PROVINCES.

Divisions for the year 1880-81.

Bilaspur District.	Chanda Division.	Chhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore Division and District.	Mandla Division.
Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	17,402 2 1	.....	.....	4,831 14 7	536 4 1	34,365 3 2
.....	.....	.....	.....	281 0 0	.....	385 0 6
.....	566 13 8	.....	.....	20 0 9	137 0 10	762 1 10
.....	.....	.....	.....	.....	.....	.....
.....	159 5 3	.....	.....	37 3 6	280 7 7	519 1 8
1,437 8 0	.....	975 14 0	3,647 5 0	2,665 2 0	.....	.....
1,426 10 9	14,782 2 1	3,163 4 5	4,651 12 1	11,720 5 6	1,579 9 0	31 13 1
1,499 0 11	9,278 3 0	831 9 10	3,617 11 4	4,252 13 11	4,163 9 7	8 11 6
1,670 11 0	13,992 2 4	2,282 4 11	1,034 2 3	6,372 7 0	1,136 1 8	29 0 0
7,250 9 1	34,064 9 9	17,218 14 0	27,091 7 6	26,571 8 6	7,162 6 9	1,057 6 11
1,840 7 9	21,106 2 7	2,719 10 2	11,857 13 5	7,520 4 1	2,558 2 9	27 0 0
.....	249 5 1	169 11 11	2 11 0	510 13 11	543 1 0	.....
.....	.....	.....	.....	.....	.....	.....
1,987 8 0	.....	.....	.....	.....	.....	.....
42 1 7	5 0 0	24 4 9	113 0 9	21 0 0	65 13 3	.....
1 2 11	172 3 0	0 9 11	31 5 4	.....	.....	15 5 4
28 4 7	1,169 11 5	29 0 0	52 2 11	3,022 3 3	41 10 3	213 9 10
17,184 0 7	1,12,947 12 3	27,413 3 11	52,099 7 7	67,826 13 0	18,204 2 9	37,314 9 10
.....	1,17,113 11 7	.....	.....	197 11 7	7 4 0	11,667 10 10
.....	.....	.....	.....	11 13 6	.....	61 13 9
.....	268 4 6	.....	.....	40 7 3	24 9 6	721 4 7
.....	.....	.....	.....	.....	.....	.....
.....	170 13 9	.....	.....	5 8 6	63 8 0	245 9 6
2,400 7 1	12,322 15 2	7,800 10 11	10,103 6 3	13,751 3 7	4,502 8 10	.....
.....	0 2 0	.....	.....	...	.....	.....
.....	.....	.....	.....	...	.....	.....
.....	.....	.....	.....	...	.....	.....
.....	.....	.....	.....	...	.....	.....
.....	.....	.....	.....	...	.....	.....
.....	3,707 10 4	.....	38 10 11	676 10 0	.....	2,238 12 8
.....	832 5 4	.....	0 4 0	1 8 3	14 4 0	464 10 6

Budget Heads Receipts.	Mandla. District.	Nagpur. Division.	Narsinghpur District.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government Agency :—			
a. Timber	.....	.....	.....
b. Firewood and Charcoal	.....	.....	.....
c. Bambus	136 7 0	.....	.....
d Sandal-wood ...	.....	.....	.....
e. Grass and other Minor Produce.. ..	.....	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers :— ..	10,041 3 2	.....	.....
a. Timber	1,303 4 8	2,696 0 3	3,793 12 0
b. Firewood and Charcoal	2,029 15 8	4,058 2 6	2,305 0 2
c Bambus	1,887 1 4	939 3 6	1 406 1 11
d. Grazing and Fodder Grass	52,590 15 4	14,791 12 6	4,061 5 2
e. Other Minor Produce	7,744 0 7	2,205 0 7	418 9 8
III.—Confiscated drift and waif wood	618 0 1	1,535 6 7	5 5 0
IV.—Revenue from forests not managed by Government :—			
a. Duty on Foreign timber and other Forest produce ..	.....	.....	.....
b. Revenue from Shared and Private Forests ..	.....	.....	.....
V.—Miscellaneous :—			
a. Fines and Forfeitures	81 12 0	.....	163 13 0
b. Refunds	.....	0 3 9	.....
c. Other Sources	.....	97 11 3	.....
Total Receipts ...	76,432 11 10	26,323 8 11	12,153 14 11
BUDGET HEADS.			
A.—Conservancy and Works.			
I.—Timber and other produce removed from the forests by Government Agency :—			
a. Timber	100 0 0	.....	.....
b. Firewood and Charcoal	.....	.....	.....
c. Bambus	.....	.....	.....
d. Sandal-wood	.....	.....	.....
e. Grass and other Minor Produce.. ...	458 0 5	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers	9,201 2 7	7,751 14 6	3,135 11 8
III.—Confiscated drift and waif wood	.....	.....	.....
IV.—Revenue from forests not managed by Government :—			
a. Duty on Foreign timber and other Forest produce ...	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....
VI.—Live stock, stores, tools and plant :—			
a. Purchase of cattle	.....	.....	.....
b. Feed and keep of cattle	.....	.....	.....
c. Stores, tools and plant	.....	.....	.....

Nimar Division.	Raipur District.	Saugor Division.	Sambalpur District.	Seoni Division.	Wardha District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
981 4 8	.....	767 11 9	.....	1,490 2 10	1,272 9 2	61,741 14 2
4,072 13 6	.....	.....	.....	43 8 0	348 7 1	5,030 13 1
0 11 10	.....	257 5 5	.....	1,690 1 11	49 8 9	3,620 8 0
.....	.....	2 4 0	.....	.....	.....	2 4 0
777 7 10	.....	472 8 0	.....	427 4 9	3,043 14 6	5,761 1 11
7,074 8 6	.....	568 1 6	5,859 15 9	9,580 7 6	.....	54,073 13 3
6,589 8 4	.....	3,665 13 7	1,122 2 4	4,373 0 3	3,759 15 2	71,193 13 3
2,620 10 3	24,394 9 3	6,473 0 11	.....	3,665 2 1	4,899 8 3	94,754 12 9
7,458 7 4	.....	1,407 5 4	.....	10,363 13 2	12 5 0	55,711 8 8
32,078 1 8	21,196 7 3	35,741 0 9	406 0 6	33,246 5 4	14,012 8 4	3,80,647 3 9
1,496 4 6	7,295 6 9	5,826 1 2	.....	3,287 8 0	357 12 6	85,288 4 10
231 13 10	.....	10 12 9	3 1 3	292 7 7	222 9 11	5,045 10 2
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	10,192 2 4
1,258 9 1	16 0 0	.....	203 4 4	66 8 0	303 6 6	3,240 10 1
34 14 10	.....	10 0 10	.....	0 0 7	20 1 0	296 1 6
2,333 13 6	1,520 0 0	659 10 4	185 15 5	630 8 6	32 7 0	13,538 12 7
66,809 1 8	54,422 7 3	55,861 12 4	7,780 7 7	69,156 14 6	28,335 1 0	8,50,139 6 4
572 3 0	.....	351 14 2	.....	565 6 9	721 1 2	1,31,296 15 1
4,189 2 0	.....	.....	.....	.....	245 15 4	4,598 12 7
2 0 7	.....	83 5 6	.....	371 0 6	81 2 0	1,592 2 5
.....	.....	.....	.....	.....	.....	.....
265 10 9	.....	73 11 6	.....	222 0 6	952 15 4	2,532 15 6
15,600 14 5	6,333 9 3	14,015 3 9	4,047 14 4	9,898 12 1	4,758 10 6	1,46,004 8 6
.....	.....	.....	.....	.....	.....	0 2 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
251 7 0	.....	.....	.....	.....	.....	251 7 0
300 0 0	.....	.....	.....	13 2 6	.....	313 2 6
190 4 10	.....	.....	.....	273 14 10	.....	7,859 10 0
536 1 11	.....	99 9 9	8 0 0	48 8 5	47 4 0	2,195 3 2

BUDGET HEADS. A—Conservancy and Works.	Direction Division.	Balaghat District	Betul Division.	Bhandara District.
BUDGET HEADS.	Rs, a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.				
VII.—Communications and Buildings :—				
a. Roads and Bridges ..	.....	.....	.....	.....
b. Buildings ...	.....	290 0 0	.....	.....
c. Other Works ...	.....	.....	.....	.....
VIII.—Demarcation, improvement and extension of forests :—				
a. Demarcation ...	.....	.....	.....	.....
b. Compensation for Land and Rights ...	.....	.....	.....	.....
c. Surveys and Working Plans ...	.....	.....	.....	.....
d. Plantations ...	23 1 0	59 0 0	.....	.....
e. Protection from fire ...	129 13 4	39 13 0	650 12 5	.....
f. Other Works ...	27 15 6	.....	26 12 0	.....
IX.—Miscellaneous :—				
a. Refunds ...	.....	.....	.....	104 1 3
b. Law charges ...	.....	.....	.....	.....
c. Other Charges ...	3,317 12 2	.....	.....	.....
Total A.—Conservancy and Works .	4,362 13 9	6,883 14 10	8,034 9 8	6,778 8 8
BUDGET HEADS.				
B.—Establishments.				
I.—Salaries :—				
a. Conservators ...	16,533 5 4	.....	.....	.....
b. Superior Officers ...	6,816 10 8	.....	1,791 7 0	1,350 0 0
c. Subordinate Forest and Depot Establishments.	940 2 3	792 0 0	2,095 7 8	.....
d. Office Establishments ...	4,380 12 8	.....	685 14 6	.....
e. Deputation and Special Allowances ...	.....	.....	.....	.....
II.—Travelling Allowances :—				
a. Conservators ...	1,504 12 0	.....	.....	.....
b. Superior Officers ...	566 9 0	.....	664 8 0	63 12 0
c. Subordinate Forests and Depot Establishments.	92 8 6	.....	.....	.....
d. Office Establishments ...	300 13 7	.....	105 5 5	.....
III.—Contingencies :—				
a. Stationery ...	25 13 11	.....	7 6 6	.....
b. Carriages of tents and records ...	758 14 3	.....	283 2 11	36 15 0
c. Rents, rates and taxes ...	675 0 0	.....	121 12 4	.....
d. Pay of Police Guards ...	.....	.....	.....	.....
e. Official Postage ...	281 6 0	.....	91 10 0	.....
Sundries ...	590 12 1	.....	102 8 8	.....
Total B.—Establishments ...	33,467 8 3	792 0 0	5,949 3 0	1,450 11 0
Grand Total of Expenditure ...	37,830 6 0	7,675 14 10	13,983 12 8	8,229 3 8

Bilaspur District.	Chanda Division.	Chindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore Division and District.	Mandla Division.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	90 2 3	.....	244 14 0
.....	303 5 6	17 4 0	1 4 0	79 6 9	48 8 0	404 4 0
.....	.....	.....	.....	1 8 0	.....	1,894 8 1
.....	93 3 11	.....	.....	.....	.....	44 6 6
.....	.....	.....	.....	.....	.....	.....
.....	388 3 9	.....	.....	.....	.....	506 6 3
.....	.....	2 0 0	95 3 9	...	.....	.....
.....	4,299 0 3	.....	....	1,707 10 5	598 9 4	1,371 5 0
.....	1,180 15 10	.....	173 9 5	211 1 3	70 15 0	310 0 10
.....	17 4 0	14 8 6	.....	.....	285 9 0	.....
.....	.....	.....	.....	.....	.....	4 14 0
.....	200 0 0	.....	.....	24 6 6	.....	....
2,400 7 1	1,40,807 15 11	7,834 7 5	10,412 6 4	10,799 1 10	5,615 11 8	20,180 8 6
.....	.....	...	.....	.....	.....	.....
.....	12,137 1 6	.....	.....	4,455 12 0	.....	13,581 2 11
.....	5,958 12 6	.....	623 0 0	4,541 0 9	1,855 11 2	2,955 5 3
.....	998 6 0	.....	.....	742 3 0	249 9 7	702 14 11
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	...
.....	2,878 15 0	.....	.....	727 0 4	...	1,744 10 1
.....	.....	.....	.....	399 0 8	.....	.....
.....	2 2 0	.....	.....	64 5 9	17 11 6	56 12 9
.....	5 5 3	4 4 4	.....	21 6 3	6 13 9	38 2 0
.....	505 8 4	.....	.....	307 1 2	151 7 7	511 8 4
.....	.....	.....	.....	.....	.....	300 0 0
.....	.....	.....	.....	.....	.....	.....
.....	452 1 0	12 10 0	.....	101 7 6	10 4 6	103 9 0
.....	232 14 3	.....	.....	225 3 10	84 9 5	502 10 9
.....	23,171 1 10	16 14 4	623 0 0	11,584 6 3	2,376 3 6	20,496 12 0
2,400 7 1	1,63,979 1 9	7,851 5 9	11,035 6 4	28,383 8 1	7,991 15 2	40,677 4 6

BUDGET HEADS. A—Conservancy and Works.	Mandla District.	Nagpur Division.	Narsinghpur District.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
BUDGET HEADS.			
A.—Conservancy and Works.—(*Contd.*)			
VII.—Communications and Buildings:—			
a. Roads and Bridges	.....	.....	.....
b. Buildings	.....	.....	.....
c. Other Works	.....	.....	.....
VIII.- Demarcation, improvement and extension of forests:—			
a. Demarcation	.....	.....	.....
b. Compensation for land and rights	.....	.....	.....
c. Surveys and Working Plans	.....	.....	.....
d. Plantations	.....	.....	.....
e. Protection from fire	.....	.....	.....
f. Other Works	.....	.....	.....
IX.— Miscellaneous:—			
a. Refunds	49 1 0	.....	60 8 9
b. Law Charges	.....	0 12 0	.....
. Other charges	.....	.....	.....
Total A.—Conservancy and Works ...	9,808 4 0	7,752 10 6	3,196 4 5
BUDGET HEADS.			
B.—Establishments.			
I.—Salaries:—			
a. Conservators	.....	.....	.....
b. Superior Officers	.....	4,500 0 0	84 0 0
c. Subordinate Forest and Depot Establishments ..	660 0 0	406 3 1	.....
d. Office Establishments	.....	66 12 7	.....
e. Deputation and Special Allowances... ...	.....	.....	.....
II.—Travelling allowances:—			
a. Conservators	.....	.....	.....
b. Superior Officers	.....	350 2 0	.....
c. Subordinate Forest and Depot Establishments ..	.....	.....	.....
d. Office Establishments	.....	5 4 8	.....
III.—Contingencies:—			
a. Stationery	.....	.....	.....
b. Carriage of tents and records	.....	89 6 2	.....
c. Rents, rates, and taxes	.....	.....	.....
d. Pay of Police Guard	.....	.....	.....
e. Official Postage	.....	127 15 6	.....
f. Sundries	.....	44 2 7	.....
Total B.—Establishments ...	660 0 0	5,589 14 7	84 0 0
Grand Total of Expenditure ...	10,468 4 0	13,342 9 1	3,280 4 5

Dated Calcutta:
The 25th June 1881.

49.—[*Prescribed*]—*Contd.*

Nimar Division.	Raipur District	Saugor Division.	Sambalpur District.	Sconi Division.	Wardha District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p.
144 7 3	.....	.....	.....	.....	.....	479 7 6
969 5 11	.....	124 8 6	.....	98 15 0	1 0 0	2,337 13 8
168 5 10	.....	.....	.....	.....	50 0 0	2,114 5 11
727 0 10	.....	208 7 6	359 12 0	63 10 6	29 5 6	1,525 14 9
157 8 9	.....	.....	.....	.....	50 0 0	207 8 9
62 3 0	.....	20 0 0	.....	.....	1 7 6	978 4 6
3,457 12 2	.....	.....	.....	.....	331 5 0	3,968 5 11
2,505 5 11	.....	465 13 10	.....	1,543 11 11	234 0 6	13,455 15 11
7,774 9 0	.....	2,896 5 7	.....	1,378 0 1	1 4 0	14,051 8 6
.....	26 10 0	154 8 6	.....	.....	76 15 0	789 2 0
15 13 3	.....	4 0 0	.....	.....	.....	25 7 3
199 13 11	.....	42 0 6	.....	53 3 4	.....	3,837 4 5
8,090 2 4	6,360 3 3	18,539 9 1	4,415 10 4	14,530 6 5	7,582 5 10	3,40,386 1 10
.....	.....	.....	.....	.....	.....	16,533 5 4
7,664 8 3	.....	5,400 0 0	.....	5,812 14 4	4,200 0 0	67,709 8 8
4,226 10 4	672 0 0	1,753 5 5	.....	5,111 15 3	1,465 15 1	36,141 8 9
739 0 0	.....	324 0 0	.....	617 7 9	.....	9,506 14 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	1,504 12 0
2,215 4 1	.....	1,005 0 0	.....	730 0 0	860 8 0	11,806 4 6
51 14 9	.....	13 4 0	.....	.....	1 8 0	558 3 11
130 6 8	.....	57 6 11	.....	55 1 5	.....	795 6 8
25 1 6	.....	4 5 9	.....	13 4 6	16 11 0	168 10 9
754 9 1	.....	318 1 0	.....	447 3 10	219 2 0	4,382 15 8
.....	.....	240 0 0	.....	309 0 0	.....	1,645 12 4
.....	.....	.....	.....	.....	.....	.....
213 3 0	.....	838 3 6	.....	138 13 6	13 13 0	1,885 0 6
288 5 10	.....	175 6 2	.....	232 7 0	9 0 3	2,488 0 10
13,308 15 6	672 0 0	9,629 0 9	.....	13,468 3 7	6,786 9 4	1,55,126 7 11
21,399 1 10	7,032 3 3	28,168 9 10	4,415 10 4	27,998 10 0	14,368 15 2	4,95,512 9 9

(Signed) A. L. HOME,

Asst. Comptroller General (Forests).

Annual Form No. 50.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL, PROVINCES.

Account Current for the year 1880-81.

	Rs.	a.	p.	Rs.	a.	p.		Rs.	a.	p.	Rs.	a.	p.
To Cash balance on 1st April 1880 ...	...	..	.	3,661	15	4	By Expenditure as per Annual Summary ...	...	.	...	4,95,512	9	9
„ Revenue as per details in Annual Summary ...	...	...	.	8,50,139	6	4							
„ Service Funds	...	...	...				„ Deposits	...		...	457	8	0
Military Fund, Madras ...	567	8	5				„ Forest Cash Remittances (Local) ...	...	.	...	...	..	...
Military Fund Bengal ..	269	6	5				„ Remittances to State Treasuries ..	8,21,335	2	10	...	...	...
Military Orphan Fund Bengal ...	147	7	0				„ Inter-Divisional Transfers ..	18,460	12	3	8,39,795	15	1
Uncovenanted S. F. P. Fund do. ...	1,170	8	0										
General Family Pension Fund ...	262	8	0	2,417	5	10	„ Advances Recoverable	...	..	...	3,26,959	6	9
							„ Suspense	...	..		970	9	4
„ Deposits	...	..	...	143	11	0	„ Government of North-Western Provinces of Oudh ...	...	..	..	81	6	3
„ Forest Cash Remittances (Local) ...	...	..	..				„ Government of India—Her Majesty's	...	..	..			
„ Remittances from State treasuries ...	4,67,397	2	9				Colonial Government Mauritius ..	...	.	...	1,021	13	0
„ Inter-Divisional Transfers ..	18,548	12	3	4,85,945	15	0	„ Inter-Departmental Transfers ..	...	..	..			
							P. W. Department Nagpur and Chhattisgarh S Railway...	9,632	4	9			
„ Advances Recoverable	...	..	...	3,45,545	4	3	do. Holkar, Sindia and Neemuch S. Railway	4,319	15	6			
„ Suspense	...	..	...	480	3	2	do. Warora Coal State Railway ..	3,632	13	7			
„ Government of Madras	...	...	..	6	0	0	do. Other Branches	1,396	9	1			
„ Government of N. W. P. and Oudh ...	...	...	...	21	12	9	Military Department, Bengal ...	10	0	9			
„ Inter-Departmental Transfers ...	...	...	...				Civil Department	...	.	..			
Public Works Department:—Nagpur and Chhattisgarh State Railway	111	14	11				Jails ... 4,581-10-2	...	...	..			
Other Branches. ...	...		..				Police ... 960- 0-0	...		..			
Military Department, Bengal ...	178	14	2				Education .. 427-12-0	...	...	.			
Do. Bombay	337	1	2				Mathematical Instrument Department 75- 1-0	...	..	...			
Civil Department .	...	.					Rewards for passing Examination 180- 0-0	...	.	..			
Jails ... 1,728-12-2	...	.	...				Miscellaneous ... 20- 4-8	6,244	11	10	25,237	7	6
Mathematical Instrument Department 370- 9-0	...	..	..										
Miscellaneous 15- 5-4	2,114	10	6	2,742	8	9	„ Cash balance on 31st March 1881 ..	...	..	...	1,067	6	9
Total ..	...	..	..	16,91,104	2	5	Total ...	...	...	..	16,91,104	2	5

Dated Calcutta:
The 25th June 1881.

(Signed) A. L. HOME,
Asst. Comptroller General (Forests).

Annual Form No. 51—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Outstandings and Liabilities on account of Contractors and Disbursers for 1880-81.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings.)	By Department (Liabilities.)	
	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction Division ...	.....	6,303 14 9	6,303 14 9	213 2 6	6,302 9 6	6,515 12 0	211 13 3	.....	
Balaghat District ...	.....	32 0 0	32 0 0	30 0 0	132 0 0	162 0 0	130 0 0	.....	
Betul Division ...	.....	3,865 8 5	3,865 8 5	63 1 3	4,063 13 9	4,126 15 0	261 6 7	.....	
Bhandara District ...	.....	750 0 0	750 0 0	... ...	750 0 0	750 0 0	... .	.....	
Chanda Division ...	0 0 5	2,27,750 5 11	2,27,750 6 4	50,587 10 6	2,12,525 14 5	2,63,113 8 11	35,363 2 7	.....	
Chindawara District ...	.....	7,866 0 4	7,866 0 4	0 5 10	7,865 10 6	7,866 0 4	... .	.....	
Hoshangabad Division ...	.....	8,235 7 4	8,235 7 4	640 12 5	7,861 11 8	8,502 8 1	267 0 9	.....	
Jubbulpore Division and District ..	.....	5,528 12 0	5,528 12 0	236 0 7	5,399 8 3	5,635 8 10	106 12 10	.....	
Mandla Division ...	.....	19,985 9 9	19,985 9 9	4,325 5 9	17,663 14 3	21,989 4 0	2,003 10 3	.....	
Mandla District ...	.....	... ...	... .	... ...	995 0 0	995 0 0	995 0 0	.....	
Nagpur Division ..	.....	6,782 10 2	6,782 10 2	114 3 11	6,866 4 8	6,980 8 7	197 14 5	.....	
Narsinghpur District ...	.....	20 0 0	20 0 0	20 0 0	... ...	20 0 0	. ...	.....	
Nimar Division ...	2 7 0	28,162 12 5	28,165 3 5	1,469 12 7	27,197 9 11	28,667 6 6	502 3 1	.....	
Saugor Division ...	0 0 2	5,196 12 10	5,196 13 0	213 5 7	5,028 12 6	5,242 2 1	45 5 1	.....	
Seoni Division ...	.....	21,901 14 10	21,901 14 10	869 9 3	21,713 2 2	22,582 11 5	680 12 7	.....	
Wardha District ...	.....	3,163 7 6	3,163 7 6	1,165 14 0	2,593 7 2	3,759 5 2	595 13 8	.....	
Total ...	2 7 7	3,45,545 4 3	3,45,547 11 10	59,949 4 2	3,26,959 6 9	3,86,908 10 11	41,360 15 1	.....	

Dated Calcutta :
The 25th June 1881.

(Signed.) A. L. HOME,
Asst. Comptroller General (Forests.)

Annual Form No. 52.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Outstandings on account of Revenue, 1880-81.

Division.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	REMARKS.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction Division	0 0 10	1,583 10 1	1,583 10 11	1,583 10 11	.....	
Betul „	.....	41,862 0 8	41,862 0 8	41,862 0 8	.....	
Chanda „	12,989 0 0	1,08,653 13 2	1,21,642 13 2	1,12,947 12 3	8,695 0 11	
Chhindwara „	.....	27,415 3 11	27,415 3 11	27,415 3 11	.....	
Hoshangabad „	.....	67,826 13 0	67,826 13 0	67,826 13 0	.....	
Jubbulpore Division and District ...	300 0 0	18,074 12 10	18,374 12 10	18,204 2 9	170 10 1	
Mandla Division	3,269 11 3	40,837 6 4	44,107 1 7	37,314 9 10	6,792 7 9	
Nagpur „	1,008 4 0	25,920 8 11	26,928 12 11	26,375 12 11	553 0 0	
Nimar „	.....	66,809 1 8	66,809 1 8	66,809 1 8	.....	
Saugor „	.....	55,861 12 4	55,861 12 4	55,861 12 4	.....	
Seoni „	1,030 11 0	68,154 0 9	69,184 11 9	69,184 11 9	.....	Realization as per Form No. 49—Rs. 8,50,139-6-4.
Wardha „	185 6 10	28,188 12 3	28,374 3 1	28,371 13 10	2 5 3	
Balaghat District	.....	31,806 13 8	31,806 13 8	31,806 13 8	.....	Written off under Government order Rs. 111-14-1.
Bhandara „	.....	44,618 11 2	44,618 11 2	44,618 11 2	.....	
Bilaspur „	.....	17,184 0 7	17,184 0 7	17,184 0 7	.....	
Damoh „	.....	52,099 7 7	52,099 7 7	52,099 7 7	.....	
Mandla „	.....	76,432 11 10	76,432 11 10	76,432 11 10	.....	Reduction in the balance allowed under explanation Rs. 5-0-0. Rs. 116-14-1
Narsinghpur „	.....	12,153 14 11	12,153 14 11	12,153 14 11	.....	
Raipur „	.....	54,422 7 3	54,422 7 3	54,422 7 3	.....	Total of column 4 Rs. 8,50,256-4-5.
Sambalpur „	.....	7,780 7 7	7,780 7 7	7,780 7 7	.....	
Total ...	18,783 1 11	8,47,686 10 6	8,66,469 12 5	8,50,256 4 5	16,213 8 0	

Dated Calcutta:
The 25th June 1881.

(Signed.) A. L. HOME,
Asst. Comptroller General (Forests).

Form No. 52 A.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Financial Results of the year 1880-81.

Divisions.	Timber and other produce removed from the forests by Government Agency.		Other Revenue.		Formation, improvement and pratcetion of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	
Direction ..	39	16	1,545	1,532	2 745	1,584	4,293	
Mandla Division ...	35,932	24,306	1,383	550	18,321	37,315	43,177	
Jubbulpore " ...	954	475	191	60	3,006	1,145	3,541	
Hoshangabad " ...	5,143	1,096	20,167	6,296	6,591	25,310	13,983	
Betul " ...	95		8 853	3,871	3,709	8,948	7,580	
Nimar " ...	5,806	6,389	20,770	17,991	27,003	26,576	40,515	
Chanda " ..	18,128	1,27,234	22,974	7,123	15,437	41,102	1,50,061	
Seoni " ..	3,054	1,659	17,708	7,913	8,940	20,762	18,512	
Saugor " ...	1,253	853	6,277	2,631	7,837	7,530	11,321	
Total ...	70,404	1,62,028	99,868	37,306	93,589	1,70,272	2,92,983	
Nagpur District ...	...	...	26,324	11,047	3,295	26,324	14,342	
Bhandara " ..	...	...	44,619	8,003	1,226	44,619	9,229	
Chanda " ..	...	.	71,846	13,930	3,986	71,846	17,916	
Wardha " .	4,714	2,779	23,621	8,002	4,588	28,335	15,369	
Balaghat " ..	...	...	31,807	7,536	1,140	31,807	8,676	
Jubbulpore " ..		...	17,059	5,370	582	17,059	5,952	
Saugor " .	249	70	48,082	16,458	3,321	48,331	19,849	
Damoh " ..	..		52,099	10,914	1,121	52,099	12 035	
Seoni " .	597	364	47,798	9,956	2,169	48,395	12,489	
Mandla " ..	136	558	76,297	10,080	831	76,433	11,469	
Betul " ..	5	69	32,909	7,873	1,461	32,914	9,403	
Chhindwara " ..	...	...	27,415	8,349	502	27,415	8,851	
Hoshanagabad " ..	27	..	42,489	14,943	2,458	42,516	17,401	
Narsinghpur " ..	...	...	12,154	3,488	292	12,154	3,780	
Nimar " ..	26	...	40,208	15,822	4,061	40,234	19,883	
Raipur " ..	...	...	54,422	7,238	876	54,422	8,114	
Sambalpur " ..	...	...	7,780	4,326	630	7,780	4,956	
Bilaspur " ...	...	...	17,184	2,608	208	17,184	2,816	
Total ...	5,754	3,840	6,74,113	1,65,943	32,747	6,79,867	2,02,530	
Grand Total ..	76,158	1,65,868	7,73,981	2,03,309	1,26,336	8,50,139	4,95,513	

Form No. 52 B.

Statement showing the amount under each Budget head debitable to each of the 3 Main heads of Expenditure shown in Form No. 52 A.

Budget Heads.		Timber and other produce removed from the forests by Government Agency.	Other Revenue.	Formation, protection and impovement of Forests.	Total.	Remarks.
		Rs.	Rs.	Rs.	Rs.	
A—I.	...	1,39,931	...	...	1,39,931	
A—II.	..	...	1,46,064	...	1,46,064	
A—III.	...	...	...		...	
A—IV.	...	...	...	...	...	
A—V.	...	...	251	...	251	
A—VI.	..	7,567	946	1,856	10,369	
A—VII.	...	2,697	384	1,850	4,931	
A—VIII.	...	...	...	34,188	34,188	
A—IX.	...	...	2,313	2,339	4,652	
Total	...	1,50,195	1,49,958	40,233	3,40,386	
B. Charges including Direction	...	15,673	53,351	86,103	1,55,127	
Grand Total	...	1,65,868	2,03,309	1,26,336	4,95,513	

Annual Form No. 55.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Timber and other produce brought to depot from the different Forest divisions, 1880-81.

Division.	Forest.	Description of Timber, &c.,	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks.
Direction ...	Hathibari ...	Lac, seers ...	176	...	176		
Mandla ...	Banjara Valley ...	Sal sleepers } 10'×10"×5" ..	892	3,117			
	Khana ...	Do.	1,389	4,916			
	Mocha ...	Do.	64	222			
	Mandla ..	Do.	34	149			
	Gwarighat ...	Do.	95	329			
	Banjara Valley ...	Do. } 6'×8"×5" ...	2,918	4,841			
	Khana ...	Do.	20	33			
	Banjara Valley ...	Do. } 6'×8"×4½" ...	339	508			
	Khana ...	Do.	139	209			
	Gwarighat ...	Do.	65	91			
	Mocha ...	Do.	...	85			
	Khana ...	Do. 10'×10"×10" ...	8	56			
	Do. ...	Do. ...	...	133			
	Banjara Valley ...	Sal scantlings ...	529	894			
	Macha ...	Do. ...	6	67			
	Gwarighat ...	Teak logs ...	4	6			
	Do. ...	Sal logs ...	1	65			
	Do. ...	Sal furdays ...	154	51			
	Mocha ...	Do. ...	26	...			
	Banjara Valley ...	Boats ...	5	...			
	Gwarighat ...	Do. ...	2	...			
	Gwarighat ...	Bullees ...	568	...			
	Khana ...	Do. ...	100	...			
	Mocha ...	Do. ...	32	...			
	Mandla ...	Teak pieces ...	6	...			
Mandla ...	Gwarighat ...	Do. ...	7	...			
	Mandla ...	Teak lot ...	1	...			
	Gwarighat ...	Sal pieces ...	18	...			
	Mocha ...	Poles ...	4	...			
	Gwarighat ...	Saj pieces ...	6	...			
	Motinala ...	Sutcutta pieces ...	100	...			
	Gwarighat ...	Do. ...	8	...			
	Do. ...	Sutcutta scantlings ...	1	..			
	Do. ...	Rohun pieces ..	2	...			
	Do. ...	Firewood ...	509	...			
	Mandla ...	Honey, seers ...	770	...			
	Topla ...	Do. ...	17	...			
	Mandla ...	Hides ...	5	...			
	Motinala ...	Hurra, maunds ...	143	...			
	Halon Block ...	Do. ...	14	...			
	Jagmundul ...	Mohwa ...	18	...			
	Do. ...	Mohwa seeds, seers ...	30	...			
	Mandla ...	Tikur, seers ...	1,045	...			
	Do. ...	Stag horns ...	325	...			
	Do. ...	Wax, seers ...	1	...			
	Jagmundul ...	Bambus ...	1,200	...			
	Kisli ...	Do. ...	37,221	...			
	Barela ...	Do. ...	30,994	...			
	Mocha ...	Do. ...	4,000	...			
Hoshangabad ...	Rajaborari ...	Teak charputs ...	240	...	83,835	15,772	
	Saonligarh ...	Do. ...	1	...			
	Rajaborari ...	Teak chulias ...	3,378	...			
	Saonligarh ...	Do. ...	1,163	...			
	Rajaborari ...	Teak sakties ...	14,599	...			
	Saonligarh ...	Do. ...	9,644	...			
	Rajaborari ...	Teak bullees ...	946	...			
Hoshangabad ...	Rajaboari ...	Puttees ...	10	...			
	Do. ...	Teak stumps ...	1,229	...			
	Saonligarh ..	Do. ...	850	...			

Division.	Forest.	Description of Timber, &c.,	No. of Pieces.	No. of Cubic feet.	Total of each Division. Pieces.	Total of each Division. Cubic feet.	Remarks
	Rajaborari	Teak khakers	3,567	...			
	Do.	Firewood, cart loads	668	...			
	Do.	Bambus	2,033	...			
	Saonligarh	Do.	538	...			
	Rajaborari	Hurra, pulas	5	...			
	Do.	Lac, seers	46	...			
	Saonligarh	Do.	84	...			
Betul					39,001		
	Badnur	Skins	4	...			
	Bhaisdehi	Hurra seers	3,450	...			
	Nimpani	Do.	150	...			
	Chicholi	Do.	890	...			
	Amla	Do.	2,100	...			
	Do.	Mohwa	8,280	...			
Nimar					14,874		
	Punasa	Teak poles	684	...			
	Do.	Teak spokes	112	...			
	Do.	Teak fellies	80	...			
	Do.	Teak pauts	8	...			
	Do.	Khair poles	45	..			
	Do.	Khair plough	16	...			
	Do.	Teak muslis	92	...			
	Do.	Khair kalies	3	...			
	Do.	Teak chhlias	68	...			
	Do.	Dhoara axles	17	...			
	Do.	Myals	1	...			
	Do.	Temru poles	6	...			
	Richpal	Anjan sleepers	141	...			
	Punasa	Tinus poles	1	...			
	Sakar	Sleepers	83	...			
	Sakwa	Do.	71	...			
	Punasa	Cotts	3	...			
	Kirgaon	Anjan kalias	17	...			
	Sakwa	Do.	68	...			
	Block No. 1	Rohun logs	11	...			
	Do.	Kalam logs	10	...			
	Punasd	Do.	3	...			
	Do.	Bambus	5,000	...			
	Do.	Firewood	...	80,175			
	Kheri	Do.	...	23,992			
	Mortakka	Do.	...	800			
	Do.	Do. maunds	166	...			
	Khiri	Do. do.	10,655	...			
	Indhwari	Do. do.	366	...			
	Khandwa	Do. cart loads	13	...			
	Masanghat	Do.	25	...			
	Punasa	Grass pulas	374,434	...			
	Kirgaon	Do.	31,309	...			
	Chaoria	Hides	3	...			
	Punasa	Skins	2	...			
	Do.	Grain	6,800	...			
	Gunjari	Buffalo hides	1	...			
	Punasa	Ox skins	2	...			
	Do.	Bullock hide	1	...			
	Amvalia	Sufade musli, seer	23	...			
	Do.	Lac	85	...			
	Do.	Other minor produce	2,007	...			
Chanda					432,423	104,967	
	Allapilli	Teak logs, Government	243	4,715			
	Do.	Do. zamindari	13,952	154,017			
	Do.	Saj logs, Government	2,482	56,806			
	Do.	Do. zamindari	8,888	77,091			
	Do.	Rewanja logs do.	28	204			
	Do.	Moyen logs do.	42	336			

Annual Form No. 55.—[*Prescribed.*]

Division.	Forest.	Description of Timber &c.	No. of		Total of each Division.		Remarks.
			Pieces.	Cubic feet.	Pieces.	Cubic. feet.	
	Allapilli	Padal logs zamandari	14	84			
	Do.	Teak scantlings	4,707	2,688			
	Do.	Teak sleepers	36,368	60,589			
	Warora	Do.	1	1			
	Allapilli	Saj sleepers	36,731	62,616			
	Deodo	Saj do.	3,580	5,671			
	Douarghat	Saj do.	4	4			
	Enroute Thapad	Saj do.	5	7			
	Allpilli	Rewaja sleepers	239	398			
	Do.	Padal sleepers	24	40			
	Do.	Moyen sleepers	80	133			
	Do.	Saj railings	4,543	1,132			
	Do.	Saj planks	2,112	1,461			
	Warora	Dhamun wood, bundles	98	...			
	Do.	Jungle wood props	74	...			
	Do.	Behra wood pieces	29	...			
	Do.	Ascoods	1,587	...			
	Hinganghat	Do.	2,019	...			
	Warora	Dhooras	353	...			
	Donarghat	Dongas	8	...			
	Do.	Bambus	4,825	...			
	Koodsavli	Do.	95	...			
	Warora	Bambus	6,560	...			
	Hinganghat	Do.	5,144	...			
	Mohurli	Horns	606	...			
Seoni	Rukhur	Teak poles	3,104	...	135,441	427,993	
	Ambagarh	Do.	1,079	...			
	Rukhur	Teak pieces	348	...			
	Ambagarh	Do.	31	...			
	Korai	Sleepers	40	...			
	East Pench	Sheeshum poles	1	...			
	Korai	Beeja slabs	7	...			
	Rukhur	Teak pieces, cart loads	200	...			
	Ambagarh	Do.	66	...			
	Korai	Anjan pieces	12	...			
	Rukhur	Beeja pieces	29	...			
	Do.	Saj pieces	65	...			
	Korai	Tendu pieces	2	...			
	Rukhur	Saj slabs	2	...			
	Do.	Tinsa pieces	30	...			
	Do.	Kahu pieces	1	...			
	Do.	Dhamun pieces	1	...			
	Do.	Dowra pieces	1	...			
	Do.	Ghotal pieces	1	...			
	Do.	Bambus	20,915	...			
	Korai	Do.	35,931	...			
	Do.	Grass pulas	172,675	...			
	Do.	Hurra, seers	3,760	...			
	Ambagarh	Do.	10,328	...			
	Rukhur	Fencing bambus, cart loads.	42	...			
	East Pench	Wax, seers	11	...			
	Do.	Honey	60	...			
	Ambagarh	Lac, seers	196	...			
	Rukhur	Fuel cart loads	140	...			
	Korai	Do.	34	...			
Saugor	Gachakota	Teak logs	29	...	249,112	...	
	Do.	Teak poles	3,925	...			
	Gorjhamar	Do.	3,095	...			
	Do.	Teak posts	18	...			
	Saugor	Sandal wood	14	...			
	Do.	Babul logs	11	...			
	Do.	Babul pieces	30	...			
	Do.	Bambus	411	...			

Annual Form No. 55.—[*Prescribed.*]

Division.	Forest.	Description of Timber, &c.	No. of		Total of each Division.		Remarks.
			Pieces.	Cubic feet	Pieces.	Cubic feet.	
	Hathkho ...	Lac, seers ...	494	...			
	Rangir ...	Do. ...	586	...			
					8,613		
Jubbulpore ...	Singrampur ...	Teak mulgas ...	12	...			
	Do. ...	Sutcutta mulgas ...	221	...			
	Do. ...	Teak karrees ...	200	...			
	Do. ...	Do. do. small ...	392	...			
	Do. ...	Teak bullees ...	2,321	...			
	Bijragogarh ...	Logs rejected ...	17	...			
	Do. ...	Bambus ...	1,400	...			
	Singrampur ...	Do. ...	4,875	...			
	Do. ...	Babai grass, bundles ...	64	...			
	Do. ...	Lac, seers ...	769	...			
	Do. ...	Hurra, do. ...	200	...			
	Bijragogarh ...	Mohwa seers ...	2,210	...			
					12,681		
Wardha ...	Arvi ...	Teak poles. ...	534	...			
	Wardha ...	Do. ...	195	...			
	Arvi ...	Poles, common kind ...	63	...			
	Do. ...	Teak, stumps ...	35	...			
	Do. ...	Bher, kannas ...	15,109	...			
	Arvi ...	Teak, bits ...	48	...			
	Wardha ...	Do. ...	15	...			
	Do. ...	Salai, boats ...	116	...			
	Do. ...	Mohwa, do. ...	18	...			
	Do. ...	Khair kanas ...	43	...			
	Do. ...	Teak slabs ...	8	...			
	Do. ...	Bambus ...	6	...			
	Do. ...	Fuel, seers ...	49,450	...			
	Do. ...	Grass, pulas ...	347,982	...			
	Arvi ...	Do. ...	72,000	...			
	Wardha ...	Honey, seers ...	183	...			
	Do. ...	Mohwa, do. ...	17,840	...			
	Arvi ...	Do. ...	95	...			
	Wardha ...	Gum, seers ...	923	...			
	Arvi ...	Do. ...	38	...			
	Wardha ...	Bhibas ...	40	...			
	Do. ...	Chironji ...	37	...			
	Arvi ...	Do. ...	3	...			
	Wardha ...	Achar ...	624	...			
	Do. ...	Charcoal, seers ...	413	...			
					5,06,112		
	Do. ...	Other minor produce ...	294	...			
		Total ...	...	...	1,482,268	548,732	

Annual Form No. 56.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account of Timber and other produce 1880-81.

Particulars.		Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Balance in hand at commencement of the year.					
Logs round	Teak	12,386	101,939		
	Sal	595	29,122		
Logs squared	Teak	372	4,716		
	Sal	26	376		
Logs other than Teak and Sal		1,323	7,110		
Scantlings	Teak	39,080	46,394		
	Sal	96	267		
	Other than Teak and Sal	316	173		
Sleepers	Teak	31,002	41,533		
	Sal	11,640	34,483		
	Other than Teak and Sal	31,919	50,271		
Slabs	Teak	652	2,466		
	Other than Teak and Sal	1,400	...		
Planks	Teak	3,747	3,924		
Pieces marketable.	Teak	3,755	10,191		
	Sal	468	...		
	Other than Teak and Sal	1,852	...		
Poles	Teak	16,892	...		
	Other than Teak	11,405	...		
	Boats	136	...		
	Dongas	120	...		
	Bambus	155,483	...		
	Fuel	1,727	...		
				326,392	406,057

Particulars.		Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Removal by Purchasers.					
Logs round	Teak	510	11,125		
	Sal	335	12,804		
Logs squared	Teak	10	164		
	Sal	7	297		
Scantlings	Teak	3,825	4,239		
	Sal	529	894		
Sleepers	Sal	5,806	20,148		
	Other than Teak and Sal	276	...		
Slabs	Teak	8	...		
	Other than Teak and Sal	162	...		
Planks	Teak	109	40		
Pieces marketable.	Teak	30,223	1,375		
	Sal	171	...		
	Other than Teak and Sal	3,737	...		
Poles	Teak	21,918	...		
	Other than Teak and Sal	19,195	...		
	Boats	9	...		
	Dongas	10	...		
	Bambus	149,039	...		
	Fuel	12,709	...		
	"	...	51,014		
	Hides	17	...		
	Charcoal	413	...		
	Grass Poolas	592,761	...		

Annual No. 56.—[*Prescribed.*] Contd.

Particulars.	Pieces. No.	Pieces. Cub. ft.	Total. No.	Total. Cub. ft.
Received during the year.				
Logs round ... Teak ...	14,345	174,541		
Logs round ... Sal ..	1	65		
Logs squared ... Other than Teak and Sal ...	11,489	134,653		
Scantlings ... Teak ...	4,707	2,693		
Scantlings ... Sal ...	535	961		
Scantlings ... Other than Teak and Sal ...	1	...		
Sleepers ... Teak ...	30,369	60,590		
Sleepers ... Sal ...	5,963	14,689		
Sleepers ... Other than Teak and Sal ...	46,998	68,869		
Slabs ... Teak ..	1	...		
Slabs ... Sal ...	...	...		
Slabs ... Other than Teak and Sal ...	9	...		
Planks ... Teak ...	...	...		
Planks ... Other than Teak and Sal ..	2,112	1,461		
Pieces marketable. Teak ...	29,833	834		
Pieces marketable. Sal ...	198	51		
Pieces marketable. Other than Teak and Sal ...	9,435	1,132		
Poles ... Teak ...	22,230	...		
Poles ... Other than Teak and Sal ...	16,279	...		
Boats ...	17	...		
Dongas ...	8	...		
Bambus ...	160,790	...		
Fuel Mds. and cart loads	13,804	...		
Ditto ...	...	104,967		
Hides ...	18	...		
Charcoal sers ...	413	...		
Grass pulas ...	1,043,028	...		
Lac sers ...	2,436	...		
Horns ..	1,211	...		
Honey and wax, sers ...	1,336	...		
Mohwa flower & seed, seers.	27,176	...		
Hurra „ ...	27,758	...		
Lac, seers ...	2,436	...		
Horns, seers ...	699	...		
Honey wax, seers ...	954	...		
Mohwa flower and seeds ...	20,896	...		
Hurra seers ...	20,568	...		
Gum „ ...	925	...		
Grain „ ...	3,240	...		
Other Minor produce ...	2,007	...	893,504	102,100
Lost or used by the Department.				
Logs round ... Teak ...	12,277	134,456		
Logs squared ... Teak ...	58	1,216		
Logs other than Teak and Sal ...	8,376	106,098		
Scantlings ... Teak ...	1,769	2,599		
Scantlings ... Other than Teak and Sal ...	317	173		
Sleepers .. Teak ...	1,263	265		
Sleepers .. Sal ...	169	700		
Sleepers .. Other than Teak and Sal ...	37	72		
Slabs ... Teak ...	285	970		
Planks ... Teak ...	2,119	2,434		
Pieces marketable. Teak ...	531	557		
Pieces marketable. Sal ...	44	51		
Pieces marketable. Other than Teak and Sal ...	4,549	1,132		
Poles .. Teak ...	2,549	...		
Poles .. Other than Teak and Sal ...	229	26		
Boats ...	2	...		
Bambus ...	12,135	...		
Fuel ...	...	7,421		
Grass ...	218,530	...		
Grain ...	280	...	2,65,519	2,58,173

Gum sers ...	961	...			*Balance in hand at close of the year.*						
Grain „ ...	6,800	...			Logs round ...	Teak ...	13,944	130,895			
Other Minor Produce sers ..	2,007	...	14,82,268	565,506		Sal ...	261	16,274			
					Logs squared ...	Teak ...	304	3,336			
						Sal ..	19	189			
					Logs other than Teak and Sal	...	4,436	35,791			
					Scantlings	Teak ...	38,193	42,239			
						Sal ...	102	334			
					Sleepers ...	Teak ..	60,108	95,380			
						Sal ...	11,628	28,324			
						Other than Teak and Sal ...	78,604	125,539			
					Slabs ...	Teak ..	360	1,417			
						Other than Teak and Sal ...	1,247	...			
					Planks ...	Teak ...	1,519	1,474			
						Other than Teak and Sal ..	2.112	1,461			
					Pieces marketable.	Teak ..	2,834	9,013			
						Sal ...	451	...			
						Other than Teak and Sal ..	3,001	..			
					Poles ...	Teak	14,655	...			
						Other than Teak and Sal ...	8,260	...			
						Boats ..	142	...			
						Dongas ...	115	...			
						Bambus ..	155,099	..			
						Fuel ...	2,822	119,624			
						Hides ...	1	...			
						Grass ...	231,737	...			
						Horns ...	512	...			
						Honey and wax ...	382	...			
						Mohwa flower and seeds ...	6,280	...			
						Hurra, seers ...	7,190	...			
						Gums „ ..	36	...			
						Grain „ ..	3,280	...			
									649,637	611,290	
Total ...	...	...	1,808,660	971,563		Total ...			1,808,660	971,563	

Form

FOREST DEPARTMENT,

Statement showing the revenue derived from, and expenditure incurred on, Timber

Name of Department.	Particulars of sleepers.	Amount supplied.		Rate.	
				At.	Per.
		No.	C. ft.	Rs. a. p.	
Holkar State Railway ...	Anjan sleepers ...	216	...	2 4 0	sleeper
	Firewood ...	...	54·642	5 8 0	c. ft.
	Firewood ...	...	11·838	7 0 0	do.
Chhattisgarh State Railway ..	Teak round logs ...	299	8,363·072	1 0 0	do.
Warora Coal State Railway ...	Teak furdays ...	249	1,240·860	1 12 0	do.
	Teak scantlings ...	34	181·333	1 12 0	do.
	Do. ...	1	1·736	1 4 0	do.
	Do. ...	73	239·622	1 2 0	do.
	Teak round logs ...	7	189·446	1 12 0	do.
	Pick handles of Dhamun wood	98	...	0 3 0	each
	Jungle wood props ...	74	...	1 8 0	each
Department Public Works, C. P.	Sal scantlings ..	515	755·61	1 12 0	c. ft.
	Bambus ...	1,000	....	15 8 0	1,000
	Firewood head loads..	332	...	0 1 2	100
	Teak furdays ...	1	4·201	1 12 0	c. ft.
	Teak scantlings ...	9	8·344	1 2 0	do.
	Teak planks ...	1	1·166	1 2 0	do.
	Bambus ...	6	...	4 2 0	100
	Lime kunker ...	...	2,915	0 12 0	100 c. ft.
	Beejasal logs ...	14	...	1 3 5	each
Jails, C. P. ...	Teak logs ...	21	741·25	1 6 0	c. ft.
	Sal logs ...	56	2,307	1 5 0	do.
	Bambus ...	15,304	...	20 0 0	1,000
	Grass Poolas..	900	...	7 8 0	1,000
	Oil Mill Laths...	28	...	0 4 0	each
	Sal logs ...	4	59·70	2 10 0	c. ft.
	Do. ...	1	33·25	1 6 0	do.
	Do. ...	1	30	1 5 0	do.
	Teak logs ...	4	62·25	1 4 0	do.
	Sal furdas ..	8	...	2 0 0	each
	Do. ...	2	...	1 8 0	do.
	Do. ...	6	...	0 12 0	do.
	Do. ...	1	...	0 5 0	do.
	Mulgas ...	100	...	1 0 0	20
Police, C. P.	Teak poles ...	2,000	...	30 0 0	100
	Teak beams ...	180	...	2 0 0	each
Military Department, Bengal ..	Bambus ...	538	...	... ...	...
Educational Department, C. P....	Khakers ...	1,000	...	25 0 0	100
	Bijasal logs ...	26	...	3 0 0	each
	Do. large ...	12	...	4 0 0	do.
	Sivan planks ...	2	...	0 4 0	do.
	Bambus ...	10,000	...	1 0 0	1,000
	Teak logs ...	1	27·50	1 8 0	c. ft.
Civil Department, C. P. ...	Teak scantlings ...	4	5·787	1 2 0	do.
	Do. ...	6	11·030	1 4 0	do.
		...	...	... ...	...

No. 59.

CENTRAL PROVINCES.

and other produce sold to Public departments from Depots during 1880-81.

Amount of revenue.			Cost to Forest Department.			Comparison of Revenue and Expenditure.	
Due.	Received.	Outstanding.	Timber expenses under A. I.	Quota of all other expenditure chargeable against Timber, &c.	Total.	Surplus.	Deficit.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
486 0 0	486 0 0	.....	487 7 6	.....	487 7 6	.....	1 7 6
3,005 5 0	3,005 5 0	.....	} 4,060 5 10	95 6 5	4,161 12 3	.....	327 12 9
828 10 6	828 10 6	.....					
8,363 1 0	8,363 1 0	.....	888 7 5	17 0 3	905 7 8	7,457 9 4	.....
2,171 7 1	2,171 7 1	.....	1,473 4 3	28 3 8	1,501 7 11	669 15 2	.....
317 5 4	317 5 4	.....	149 12 8	2 14 0	152 10 8	164 10 8	.....
2 2 8	2 2 8	.....	0 13 2	0 0 2	0 13 4	1 5 4	.....
269 9 2	269 9 2	.....	197 12 8	3 11 8	201 8 4	68 0 10	.....
331 8 5	331 8 5	.....	200 13 10	3 13 4	204 11 2	126 13 3	.....
18 6 0	18 6 0	.....	5 10 0	0 1 8	5 11 8	12 10 4	.....
111 0 0	111 0 0	.....	60 2 0	1 2 5	61 4 5	49 11 7	.....
1,322 5 1	1,322 5 1	.....	589 3 6	94 1 9	683 5 3	638 15 10	.....
15 8 0	15 8 0	.....	.....	.....	.....	15 8 0	.....
2 9 6	2 9 6	.....	.....	.....	.....	2 9 6	.....
7 5 7	7 5 7	.....	1 3 0	0 0 3	1 3 3	6 2 4	.....
9 6 2	9 6 2	.....	6 10 0	0 2 0	6 12 0	2 10 2	.....
1 5 0	1 5 0	.....	0 12 0	0 0 2	0 12 2	0 8 10	.....
0 4 0	0 4 0	.....	0 0 3	.....	0 0 3	0 3 9	.....
21 13 9	21 13 9	.....	.....	.....	.....	21 13 9	.....
17 0 0	17 0 0	.....	.....	.....	.....	17 0 0	.....
1,019 3 6	1,019 3 6	.....	324 4 9	138 15 9	463 4 6	555 15 0	.....
3,027 15 0	3,027 15 0	.....	1,730 4 0	576 12 0	2,307 0 0	720 15 0	.....
306 1 3	139 12 9	166 4 6	195 11 9	17 0 7	212 12 4	93 4 11	.....
6 12 0	6 12 0	.....	1 12 9	.....	1 12 9	4 15 3	.....
7 0 0	7 0 0	.....	.....	.....	.....	7 0 0	.....
156 11 5	156 11 5	.....	44 12 5	14 14 9	59 11 2	97 0 3	.....
45 11 6	45 11 6	.....	24 15 0	8 5 0	33 4 0	12 7 6	.....
39 6 0	39 6 0	.....	22 8 0	7 8 0	30 0 0	9 6 0	.....
77 13 0	77 13 0	.....	21 9 9	11 10 9	33 4 6	44 8 6	.....
16 0 0	16 0 0	.....	0 1 4	.....	0 1 4	15 14 8	.....
3 1 2	3 1 2	.....	0 0 2	.....	0 0 2	1 7 10	.....
4 8 0	4 8 0	.....	0 1 0	.....	0 1 0	4 7 0	.....
0 5 0	0 5 0	.....	0 0 2	.....	0 0 2	0 4 10	.....
5 0 0	5 0 0	.....	.....	.....	.....	5 0 0	.....
600 0 0	600 0 0	.....	62 8 0	.....	62 8 0	537 8 0	.....
360 0 0	360 0 0	.....	11 4 0	.....	11 4 0	348 12 0	.....
10 0 9	10 0 9	.....	3 12 9	.....	3 12 9	6 4 0	.....
250 0 0	250 0 0	.....	.....	.....	.....	250 0 0	.....
78 0 0	78 0 0	.....	.....	.....	.....	78 0 0	.....
48 0 0	48 0 0	.....	.....	.....	.....	48 0 0	.....
0 8 0	0 8 0	.....	.....	.....	.....	0 8 0	.....
10 0 0	10 0 0	.....	.....	.....	.....	10 0 0	.....
41 4 0	41 4 0	.....	14 8 6	5 2 6	19 11 0	21 9 0	.....
6 8 1	6 8 1	.....	4 2 5	0 1 2	4 3 7	2 4 6	.....
13 12 7	13 12 7	.....	9 2 0	0 2 9	9 4 9	4 7 10	.....
23,435 9 7	23,269 5 1	166 4 6	10,599 12 10	1,027 3 0	11,626 15 10	12,136 4 9	329 4 3
				Deduct deficit ...		329 4 3	
				Balance for the Department ...		11,807 0 6	

Form

FOREST DEPARTMENT,

Abstract showing the value of timber and

Description of timber and other stock.		On hand at commencement of the year.		Received during the year.	
		Number.	Value.	Number.	Value.
			Rs.		Rs.
Logs round ...	Teak ...	12,386	56,472	14,345	1,30,924
	Sal ...	595	26,372	1	65
Logs squared ...	Teak ...	372	4,716	.....	.....
	Sal ...	26	331	.....	.....
	Logs other than teak and sal ...	1,323	696	11,489	25,225
Scantlings ...	Teak ...	39,080	27,237	4,707	1,805
	Sal ...	96	67	535	248
	Other than teak and sal ...	316	87	1	.....
Sleepers ...	Teak ...	31,002	70,710	30,369	86,374
	Sal ...	11,640	22,948	5,963	7,253
	Other than teak and sal ...	31,919	40,655	46,998	53,188
Slabs ...	Teak ...	652	2,416	1	.....
	Sal ...	.....	.....	.....	.....
	Other than teak and sal ...	1,400	700	9	2
Planks ...	Teak ...	3,747	2,869	.....	.....
	Other than teak and sal ...	.....	.....	2,112	548
Pieces marketable ...	Teak ...	3,755	6,166	29,833	5,599
	Sal ...	468	65	198	142
	Other than teak and sal ...	1,852	382	9,435	1,825
Poles ...	Teak ...	16,892	3,801	22,230	2,518
	Other than teak and sal ...	11,405	1,250	16,279	1,531
	Boats ...	136	682	17	108
	Dongas ..	120	620	8	40
	Bambus ...	155,483	1,212	160,790	2,701
	Fuel, Maunds and cart-loads.	1,727	4,317	13,804	6,141
	Hides ...	...	...	18	18
	Charcoal, sers	...	...	413	13
	Grass, pulas.	...	...	1,043,028	3,771
	Lac, sers	...	...	2,436	901
	Horns ...	...	...	1,211	260
	Honey and wax sers.	...	...	1,336	402
	Mohwa flower and seeds "	...	...	27,176	278
	Hurra "	...	...	27,758	412
	Gum "	...	...	961	60
	Grain "	...	...	6,800	395
	Other minor produce "	...	...	2,007	259
	Total ...	326,392	2,74,771	1,482,268	3,33,006
	Elephants ...	5	4,223	1	700
	Other live-stock ...	243	3,312	12	490
	Machinery ...	...	31,411	...	828
	Other dead-stock ...	...	27,390	...	2,866
	Total ...	248	66,336	13	4,884
	Grand Total ...	326,640	3,41,107	1,482,281	3,37,890

NOTE.—Difference in value at commencement

No. 60.

CENTRAL PROVINCES.

of live and dead stock for the year 1880-81.

Total.		Sold, otherwise disposed of, and lost during the year, and allowance for depreciation.		On hand at close of the year.		Cause of loss and other particulars.
Number.	Value.	Number.	Value.	Number.	Value.	
	Rs.		Rs.		Rs.	
26,731	1,87,396	12,787	1,11,590	13,944	75,806	
596	26,437	335	12,411	261	14,026	
372	4,716	68	1,380	304	3,336	
26	331	7	169	19	162	
12,812	25,921	8,376	19,867	4,436	6,054	
43,787	29,042	5,594	2,538	38,193	26,504	
631	315	529	215	102	100	
317	87	317	87	.....	...	
61,371	1,57,084	1,263	1,868	60,108	1,55,216	
17,603	30,201	5,975	1,877	11,628	28,324	
78,917	93,843	313	627	78,604	93,216	
653	2,416	293	999	360	1,417	
.....	.....	.....	.....	.....	...	
1,409	702	162	79	1,247	623	
3,747	2,869	2,228	1,747	1,519	1,122	
2,112	548	.....	.....	2,112	548	
33,588	11,765	30,754	6,246	2,834	5,519	
666	207	215	151	451	56	
11,287	2,207	8,286	1,520	3,001	687	
39,122	6,319	24,467	3,345	14,655	2,974	
27,684	2,781	19,424	2,326	8,260	455	
153	790	11	78	142	712	
128	660	10	50	118	610	
316,273	3,913	161,174	2,379	155,099	1,534	
15,531	10,458	12,709	4,151	2,822	6,307	
18	18	17	18	1	...	
413	13	413	13	...	...	
1,043,028	3,771	811,291	2,432	231,737	1,339	
2,436	901	2,436	901	...	...	
1,211	260	699	161	512	99	
1,336	402	954	211	382	191	
27,176	278	20,896	278	6,280	..	
27,758	412	20,568	412	7,190	...	
961	60	925	58	36	2	
6,800	395	3,520	163	3,280	232	
2,007	259	2,007	259	...	...	
1,808,660	6,07,777	1,159,023	1,80,606	649,637	427,171	
6	4,923	...	422	6	4,501	
255	3,802	25	1,151	230	2,651	
...	32,239	...	9,068	...	23,171	
...	30,256	...	5,511	...	24,745	
261	71,220	25	16,152	236	55,068	
1,808,921	6,78,997	1,159,048	1,96,758	649,873	4,82,239	

and close of the year Rs. 1,41,132.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Forest buildings in the Central Provinces, costing over Rs. 200 each at the close of 1880-81.

Division.	Situation.	Description of buildings.	Original cost. Of buildings on hand at commencement of the year.	Original cost. Of buildings constructed during the year.	Cost of repairs during the year.	Rent realized in 1880-81.	Remarks.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Jubbulpore ...	Khitoli ...	Rest-house, 1 room and veranda kutcha brick walls ...	400 0 0	.....	48 8 0	.....	
Hoshangabad ...	Head-quarters ...	Small pucca bungalow ...	2,094 0 0	.....	37 0 0	9 0 0	For portion of the building.
Nimar ...	" ...	" " ...	4,054 0 0	.....	145 3 3	82 6 5	" "
" ...	Punassa ...	Pucca rest-house ...	626 0 0	.....	12 0 0	.....	
Chanda ...	Chanda Civil Station...	Terrace roof bungalow ..	8,000 0 0	.....	249 10 3	572 5 5	For portion of the building.
" ...	Moharli ...	Rest-house ...	500 0 0	.....	7 5 0	.....	
" ..	Alapilli ...	" ...	300 0 0	.....	46 6 3	.....	
Seoni ...	Korai ...	Small pucca Inspection bungalow...	1,000 0 0	.....	28 0 0	.....	
Saugor ..	Garhakota ...	Pucca Inspection bungalow ...	1,000 0 0	.....	96 1 6	.....	

REPORT

WITH THE CHIEF COMMISSIONER'S REVIEW

ON THE

Forest Administration

IN THE

CENTRAL PROVINCES,

FOR

THE YEAR 1881-82.

NAGPUR:

PRINTED AT THE CHIEF COMMISSIONER'S OFFICE PRESS.

1882.

No. 239 F., dated Fort William, the 5th March 1883.

From—A. MACKENZIE, Esq., Secretary to the Government of India.

To—The Chief Commissioner of the Central Provinces.

I AM directed to acknowledge the receipt of your Officiating Assistant Secretary's letter No. 3914—228 of the 14th October last, forwarding the Report of Forest Administration in the Central Provinces for the year 1881-82, with your orders thereon.

Area of forests.

2. Some small changes have taken place during the year under review in the forest area of the province, as will be seen from the following statement :—

	Area in square miles.			
	On the 1st April 1881.	On the 1st April 1882.	Increase.	Decrease.
First class reserves	2,535	2,588	53	...
Second " "	16,850	16,842	...	8
Unreserved forests	281	289	8	..
Total ...	19,666	19,719	53	..

Of the increase in the area of the first class reserves 45 square miles are due to corrections, while the balance represents transfers from the second class to the first class reserves.

No. 1039 F., dated the 30th November 1881.

In the orders on the Report for 1880-81, it was requested that the Conservator's attention should be drawn to the importance of selecting the more valuable parts of the second class reserves, especially those situated in the vicinity of towns, large villages, and other centres of consumption, and of treating these as first class reserves. Although only an area of eight square miles has been so transferred during the year, the Governor General in Council is glad to notice from the present Report that the subject has received attention, and it is hoped that the Report for 1882-83 will show good progress in this respect. It will not be difficult to carry out the measure here contemplated, provided it is done soon; but insurmountable difficulties may arise when means of communication develop and the population has, in consequence, largely increased.

Forest offences.

3. The number of forest offences compares as follows with that in the previous year :—

Year.	Prosecutions.			Cases compounded.			Total.		
	I Class Reserves.	II Class Reserves.	Total.	I Class Reserves	II Class Reserves.	Total.	I Class Reserves.	II Class Reserves.	Total.
1880-81 ...	28	876	904	...	...	4,021	...	...	4,925
1881-82 ..	22	778	800	427	8,001	8,428	449	8,779	9,228

The number of offences in 1881-82 has been nearly double that of the previous year, and this great increase is ascribed to a more complete record of cases in the year under review. The Governor General in Council accepts the assurance given by you that there is no growing tendency to disregard the law; but at

the same time the subject should continue to receive attention. It is reported that a large proportion of the offences are of a very trivial character.

Out of 798 cases disposed of by the courts during the year, convictions were obtained in 734, which is equal to 92 per cent., as compared with 90 per cent. in the previous year.

Protection from fire.

4. The results of fire-protection during the year under review are not satisfactory, as will be seen from the following data :—

	Acres.
Area attempted	904,582
Failures	130,689
Proportion of failures to area attempted in per cent.	14

The average failures of the four preceding years amounted to 11 per cent. of the area attempted. Some corrections were made in the areas attempted, but practically no change worth recording has taken place.

It will be seen that one-seventh of the area under protection has been burnt, and the year is described as being unfavourable to fire-protection. It is noticed that a change in the system is, to some extent, contemplated ; but the Governor General in Council would deprecate any steps in this direction, until it is clearly shewn whether the unfavourable results of late years have been brought about by the defects of the present system, or by too rapid extension of the areas brought under protection. Almost complete success has been attained in past years when smaller areas were attempted, and it is highly probable, if further extension is postponed for a few years, except in so far as it may be necessary in order to secure better boundaries, and when the work on the areas so far taken in hand has been consolidated, that success will return to the efforts of the Department. Accidents are of course likely to happen under any circumstances, but it is essential that the chance of their occurring should be reduced to a minimum, and this has evidently not been the case during the last five years. At the same time His Excellency in Council is fully aware of the great amount of good done by fire-protection in the Central Provinces, where this section of forest work was first fully understood; and, in judging of the comparative failure of late years, operations have been measured by a much higher standard than would have been adopted in the case of a province where no success, or only partial success, had been attained in previous years.

Cultural operations.

5. Reproduction in the forests of the Central Provinces is attained chiefly by protection, and artificial planting and sowing are only resorted to in exceptional cases, to supply special demands and to improve the composition of the forests. At the same time it appears to His Excellency in Council worthy of consideration whether the success of fire-protection would not in many instances be increased by planting up areas now covered with grass at or near the boundaries of the protected blocks, where a sufficient number of seed-bearing trees is not available. If in these cases the re-stocking is left to nature, very long periods must ordinarily elapse before any appreciable good can be effected, and the planting of strips with suitable trees appears a measure which might well be considered by the Forest Department.

Departmental timber operations.

6. In the orders on the Report for 1880-81, it was pointed out that the departmental timber operations during the years 1877 to 1881 had resulted in a cash deficit of Rs. 65,136, that upwards of 500,000 cubic feet of timber could not be traced in the returns, and that it would be an advantage if the operations were in future years more fully and clearly analysed in the summary of the Report.

It is satisfactory to notice that the results of the year 1881-82 have converted the deficit into a surplus, as will be seen from the following data :—

Years.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1877-78 to 1880-81	4,70,742	5,35,878	.....	65,136
1881-82	3,10,176	1,38,313	1,71,863	.....
Total ...	7,80,918	6,74,191	1,06,727	.....

This gives an average annual surplus of about Rs. 21,000 for the last five years. Although this is a comparatively small sum, considering the quantity of material sold, there can be no doubt that, with the explanations now given, the results are not unsatisfactory. The bulk of the material has been extracted from forests situated far distant from the markets; part of it consisted of old sal timber found lying in the forests; part was bought from private owners for conversion; and all the timber felled in the Government forests was removed more for the purpose of encouraging the growth of young teak than with the view of any great profit.

The discrepancy noticed in the orders on last year's Report has also been explained; and was due to the fact that certain timber had been shown twice in the old Form No. 55, "Timber and other produce brought to depôt from the different Forest Divisions," once when received from the forests and a second time when received after conversion in depôt.

On the whole, the departmental transactions have now been much more clearly exhibited in the Report, so that it is possible to understand and follow the operations through their successive stages.

Financial results.

7. The financial results are as follow :—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
First class reserves	4,15,679	2,55,530	1,60,149
Second „ „	7,57,205	2,41,483	5,15,722
Total ...	11,72,884	4,97,013	6,75,871

These data shew a considerable improvement as compared with the results of the previous year, when the surplus amounted to Rs. 3,54,626 only. The first class reserves have this year yielded a surplus of Rs. 1,60,149, while they exhibited a deficit of Rs. 1,22,711 in 1880-81.

As pointed out by you, the financial results have made most satisfactory progress during the last twelve years, the averages during periods of three years being as follow :—

Years.	Receipts.	Surplus.	Proportion of surplus to receipts, in per cent.
	Rs.	Rs.	Rs.
1870-71 to 1872-73	5,29,186	2,66,869	50
1873-74 to 1875-76	6,51,827	3,35,641	51
1876-77 to 1878-79	7,32,699	3,99,355	55
1879-80 to 1881-82	10,09,915	5,04,882	50

It is a specially satisfactory feature in these data, that the proportion between surplus and receipts is the same now as it was twelve years ago.

7. The Governor General in Council is glad to learn that the system introduced into the Central Provinces in 1877, with a view to establish more intimate relations between District and Forest Officers, has worked well, and that it has been accompanied by good results. There seems little doubt that the system itself is based on correct principles, and any peculiarities in its application, as now practised in the Central Provinces, can be removed as further experience is gained.

8. On the whole the results of the year may be considered as satisfactory, and His Excellency in Council desires to thank you for the interest taken by you in this Branch of the Administration. As stated by you, the position of the Department is now one of considerable promise, and this has been brought about to a large extent by the patient and judicious exertions of Major Doveton, the Conservator of Forests, who has, with a short interruption, been the head of the Department in the Central Provinces since 1868.

R B.—Home Department Press—No. 197—8-3-85—210.

Appendix shewing the discrepancies noticed in the Statements appended to the Report of Forest Administration in the Central Provinces for the year 1881-82.

FORM No. 62.

(Account of timber and other produce cut or collected by Government agency and brought to sale depôts or sold locally.)

THE figures representing the balance at the commencement of the year do not agree, as they should, with those entered in the Report for 1880-81 as the balance at the close of that year.

FORM No. 65.

(Value of timber and other produce at sale depôts.)

THE figures representing the number and value on hand at the commencement of the year do not agree, as they should, with those given in the Report for 1880-81 as the number and value on hand at the close of that year.

No. $\frac{3521}{201}$

FROM

A. H. L. FRASER, ESQUIRE, C. S.,

OFFG. SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

To

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpur, the 11th September 1882.

SIR,

I am directed to acknowledge receipt of your letter No. B-64, dated 26th ultimo, forwarding the annual report on Forest administration for the year 1881-82.

Area.

2. The forest area at the disposal of Government at the close of the year was 19,719 square miles, divided as follows :—

First class reserves	...	...	2,588
Second ,,	...	...	16,842
Unreserved forests	...	...	289

These figures show an increase in the area of the first class reserves of 53 square miles, and in that of unreserved forests of 8 square miles, as compared with the figures for last year; while the second class reserves show a decrease of 9 square miles. Of the apparent increase in the area of first class reserves 44 square miles is due merely to the correction of area previously estimated without the aid of a map. The real increase is 9 square miles, transferred from the Jubbulpore second class reserves.

Boundaries.

3. You show, in the details given in Chapters II. and III., that the maintenance of the boundaries of the first class reserves is not neglected, and that the demarcation of the second class reserves is receiving attention. But you do not give a tabular statement showing what part of the boundary of each reserve is in good order, and what portion remains to be cleared. This information, you say, has not been sent to you by all Divisional Officers. I am to express the Chief Commissioner's regret that this should have been the case, both because the Government of India have particularly asked for such a tabular statement, and also because the maintenance of such a statement would enable you to see at a glance where sufficient attention is given to this important work. The Chief Commissioner desires that you will insist on this information being regularly given.

Forest offences.

4. In the first class reserves 451 cases of breach of Forest laws were reported. In 3 cases, the offenders were not detected: in 427, the persons concerned were allowed to compound; and in 21, prosecution was resorted to. Conviction was obtained in 18 cases. In the second class reserves, 8,779 offences were reported: in 777 (involving 1,194 persons) prosecution was resorted to; and convictions were obtained in 716 (involving 1,038 persons). In all the other cases the persons concerned compounded. A large proportion of the offences appear to have been of a very trivial character; and prosecution was unnecessary. You do not consider that there is any growing tendency to disregard the law: the Chief Commissioner concurs in this view, and believes indeed that there is rather a growing respect for the Forest law among the people. The arrangements for watch and ward are very fairly efficient.

5. The area (in acres) of the forest tracts protected from fire during the dry seasons of 1881 and 1882 may be thus compared :—

Protection from fire.

	1881.	1882.
Area the protection of which was attempted ...	924,380	904,582
Failures	54,552	130,689
Actually protected	869,828	773,893

The decrease of about 20,000 acres shown in the area of attempted protection is unreal: it is due to the correction of certain mistakes in the returns. The fact is that this area has increased, An area of 2,000 acres was brought under protection in the vicinity of Jubbulpore rather with the object of making a revenue from grass than for the protection of forest growth; and 10,680 acres were added to the protected area in Nimar with a view to secure a river boundary. The Government of India, in reviewing last year's report, laid down that "no further "extension of fire protection should ordinarily be taken in hand until the exist-"ing areas under protection are made quite safe." These orders were not received by you until after the areas above referred to were brought under protection. They will now, no doubt, be kept steadily in view.

6. The proportion of failures to the area of attempted protection was over 14 per cent as against 6 per cent, for the preceding year, and an average of 11 per cent for the preceding four years. This is certainly not a satisfactory result. You point out that the season was not favourable; but, when it is considered that failure continued in this proportion would mean the passage of fire over the whole protected area within seven years, the results cannot be regarded as other than decidedly unsatisfactory. It may be, as you indicate, that they point to the necessity of a change of system: this question should be fully considered and separately reported on. It is certain that they justify the orders of the Government of India which have been already quoted. At the same time the Chief Commissioner concurs with you in thinking that as a matter of fact the results of protection from fire in the forests of the Central Provinces have been far from insignificant; and I am to record his acknowledgment of the good work you have done in this direction.

7. The cultural operations of the year have not been extensive. The chief operations were in Nimar and Saugor. The success which has attended them is only partial. The Chief Commissioner concurs with you that "in most of the forest areas protection "affords the widest field for improvement; and outlay on planting can only be "justified in exceptional cases to supply special demands and in some cases to "improve the composition of the forests." The operation of nature with the aid of conservancy has been shown by experience to have most important results. And your department cannot ordinarily afford to subordinate forest conservancy to costly experiments and methods the sphere of which is necessarily limited, and the results, except under the conditions you specify, comparatively small.

Reproductive measures.

8. In reviewing last year's report, the Government of India drew attention to the fact that the departmental timber operations of four years (1877-1881) had resulted in a deficit of Rs. 65,136. In paragraph 38 of your report, however, you point out that the operations of the year under review have been very successful; and that the profits of that year must be taken into account in estimating the propriety of the operations of former years. Treating the operations of these five years in very much the same way as that adopted in the review of the Government of India, though the figures may slightly differ, you show that the result is a profit of Rs. 1,24,448. And you state that it is "far from improbable that the current "year's transactions will materially raise the average profits." The profit you show is not very great. It would be insignificant if the whole object of the operations of the department were to show profit. But this is far from being its sole, or even its chief, object. The time is now coming when substantial profit may be reasonably looked for. But hitherto the work of the department has mainly been to make provision for the future. Timber operations are now, how-

Timber operations.

ever, assuming considerable dimensions and realizing good profits in the Chanda district; and when communications with Mandla are more fully opened up, the operations in the forests of that district may be expected to be both extensive and profitable. There can be no doubt that the operations of your department may now be reasonably expected rapidly to expand.

Financial results.

9. It may therefore be expected that the financial results of the operations of the department will steadily become more manifestly satisfactory. For the year under review they show great improvement as compared with the figures for the preceding year. The figures may be thus compared :—

Year.	Receipts.		Expenditure.		Profit.		Total.
	First Class Reserves.	Second Class Reserves.	First Class Reserves.	Second Class Reserves.	First Class Reserves.	Second Class Reserves.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1880-81 ...	1,70,272	6,79,867	2,92,983	2,02,530	—1,22,711	4,77,337	3,54,626
1881-82 ...	4,15,679	7,57,205	2,55,530	2,41,483	1,60,149	5,15,722	6,75,871
Increase in 1881-82..	2,45,407	77,338	—37,453	38,953	2,82,860	38,385	3,21,245

This shows a very striking increase. But you yourself give utterance to a warning against basing any conclusion on the figures of one year. And you give in paragraph 46 of your report a statement in which the last twelve years are divided into four periods of three years each, and the averages of these periods are compared. The Chief Commissioner thinks it worth while to reproduce this interesting statement here.

Period of three years.	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1870—1873	5,29,152	2,62,305	2,66,847
1873—1876	6,51,827	3,16,186	3,35,641
1876—1879	7,32,699	3,33,344	3,99,355
1879—1882	10,09,915	5,05,033	5,04,882

These figures show a very steady rise in revenue. They also indicate that that increase may be expected to grow more rapidly in future. The impression they convey is distinctly one of satisfaction with the results that are being achieved, and of hope that substantial profits will now be recorded year by year.

Organization.

10. The Government of India, in reviewing last year's report, directed that you should this year notice prominently the results of the change of system introduced in 1877 with a view to establish more intimate relations between the Forest and District administration of the Province. The Forest divisions were so arranged that their boundaries should coincide, as far as practicable, with those of the civil districts; and a Forest officer was appointed to each district in which the forests were deemed of sufficient importance to justify the expenditure. The district Forest officer was placed in charge of both the first and the second class reserves: in regard to the former he is subordinate to you; and in regard to the latter, to the district officer. You state that the result of this change has been to "establish "closer relations between the forest and civil officers, thereby giving forest

"officers influence they would not otherwise have exercised, while it has "supplied the district officers with additional means of obtaining information "regarding portions of their districts, which they themselves are unable fre-"quently to visit. No difficulty has been experienced from the arrangement "under which, in respect of certain forests, Forest officers act under the orders "of the Conservator, in respect of others, under the orders of district officers. "Still it is a peculiar arrangement which cannot be regarded as altogether "satisfactory, and it is one which will have to be considered at no distant period."

11. The Chief Commissioner strongly endorses the opening sentences of the above extract, and hardly understands how you have been led to close it as you have done. The system has, in his opinion, worked exceedingly well. There has been little or no friction: even at first starting there was but little friction; and that little has now disappeared. The district officer has had the advantage of the professional skill of the Forest officer in arranging for the management of second class reserves; and the results in many districts have been signally good. Systematic management has been introduced; and revenue has increased. On the other hand, the Forest officer has had his hands strengthened in the management of his own first class reserves. It is quite true that when the permanent reserves that it may be found necessary to maintain have been separately demarcated, the question of placing such of them as are now managed by district officers under the Forest Department will arise. It will probably be found expedient to place all permanent reserves under the department. But that will not be any subversion of the system now in force. It will be but the transfer of some second class reserve areas into the first class. The great object of maintaining the present close connection between the District and the Forest officer is not only that the skill of the latter may be at the disposal of the former, but also that the present requirements and convenience of the people may be as fully as possible considered in deciding all questions of forest conservancy. The advantage of this has been noticed by the Chief Commissioner over and over again since the present system was introduced.

Extension of permanent reserves.

12. In this connection I am to say that the Chief Commissioner recognizes fully what has been already done in the way of extending the first class reserves. He desires that this work should receive your special attention. The Government of India have clearly laid down, in respect to the future treatment of the second class reserves, that "the first and most important step is to "select the more valuable parts of the areas, especially in the vicinity of towns, "large villages and other centres of consumption, and to treat them as "first class reserves, while the remainder will yield chiefly pasture and fuel." This is a matter the importance of which to the future interests of the country cannot easily be overrated. It is a matter which can, in the opinion of the Chief Commissioner, best be disposed of under the existing system of co-operation between District and Forest officers. I am to invite your earnest attention to it.

13. It is unnecessary for the Chief Commissioner to follow you further into the details of your report. They give evidence throughout of your own constant supervision, and of the good work which you secure from your subordinates. The Chief Commissioner notices with pleasure your special commendation of the officers mentioned in the concluding chapter of your report.

14. In conclusion I am to thank you for your report which is one of very considerable interest. The Chief Commissioner also regards it as on the whole very satisfactory. The position of your department is now one of considerable promise; and Mr. Morris desires to record his appreciation of the patience and energy with which through years of labour you have prominently assisted in bringing it into that position.

I have the honor to be,
Sir,
Your most obedient Servant,

L. FRASER,
Offg Secretary.

No. B-64 of 1882-83.

From

Major J. C. DOVETON,

Conservator of Forests,

Central Provinces.

To

The SECRETARY to the CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpur, the 26th August 1882.

Sir,

I have the honour herewith to submit the Annual Report on Forest Administration for the year 1881-82.

I have the honor to be,

Sir,

Your most obedient Servant,

J. C. DOVETON,

Conservator of Forests,

Central Provinces.

Progress Report of Forest Administration in the Central Provinces

FOR THE YEAR 1881-82.

By Major J. C. DOVETON, Conservator of Forests, C. P.

CHAPTER I.

Summary of Administration for 1881-82.

1. The arrangements for the management of the State forest property introduced in 1877 underwent no change during 1881-82.

2. During the year under report, the Deputy Commissioners of the following districts had at their disposal the services of Forest Officers of this superior staff to assist them in forest administration :—

Nagpur.	Wardha.
Chanda.	Seoni.
Saugor.	Hoshangabad.
Nimar.	Betul.

3. In the following districts the 2nd Class and Unreserved forests were administered by the District Officers assisted by a subordinate Forest establishment only :—

Bhandara.	Balaghat.
Mandla.	Jubbulpore.
Damoh.	Narsinghpur.
Chhindwara.	Raipur.
Bilaspur.	Sambalpur.

4. In the Raipur district an officer of the superior staff was employed for part of the year, but his work was connected with the formation of permanent reserves, and he consequently took no part in the general forest administration. To the Bhandara district an officer was also attached, but the control in detail of all forest matters was kept by the Deputy Commissioner in his own hands.

5. The 1st class reserves in Mandla and Jubbulpore formed a separate charge under a Deputy Conservator.

The District Forest Officers in Chanda, Seoni, Saugor, Hoshangabad, Nimar and Betul held, in addition to their duties as District Forest Officers, the control charge of the 1st class reserves within their respective divisions.

6. In accordance with the orders of the Government of India on the report for the previous year, I now record a few remarks on the operation of the system under which Forest Officers of the superior staff have been made Assistant to District Officers in forest administration. The system, so far as it has been carried out, has worked smoothly : in one instance only, *viz.* in Wardha, has it been otherwise, and here it must be attributed to want of intelligence on the part of the Forest Officer, and to the control exercised over that officer being insufficient. In some cases it has resulted in the introduction of system in the working of the forests, while generally it has tended to better management, and it has certainly brought about a very considerable increase in revenue. With perhaps some rare exceptions the understanding between Forest and Civil Officers in these Provinces has been too good, and the absence of any spirit of jealousy too decided to admit of any advantage in this respect from the system under reference; but it has established closer relations between the Forest and Civil Officers, thereby giving Forest Officers influence they would not otherwise have exercised, while it has supplied the District Officers with additional means of obtaining information regarding portions of their districts, which they themselves are unable frequently to visit.

7. No difficulty has been experienced from the arrangement under which, in respect of certain forests, Forest Officers act under the orders of the Conservator; in respect of others, under the orders of District Officers. Still it is a peculiar arrangement which cannot be regarded as altogether satisfactory, and it is one that will have to be reconsidered at no distant period.

8. As soon as the permanent reserves that it is necessary to maintain have been separately demarcated, these forests, irrespective of whether or not they are administered through the District Officers, will have to be put on the footing of 1st class reserves, and to the management of these forests together with those already constituting 1st class reserves, the attention of the Forest staff must be mainly devoted, and it would be an uncalled for diversity of system to have, of forests of equal importance, part administered direct by the Conservator and part through the District Officers.

9. The whole area of permanent reserves might be managed direct by the Conservator, but in consideration of the extent to which Divisional Officers' hands must be strengthened by subordination to District Officers, and the extent to which the work of Forest Officers may be facilitated by the influence of District Officers, I incline to the opinion that, reserving to the Conservator the organization of the establishment and the control of the expenditure, and securing to him the direction in matters relating to the conservation of the forests, the system of working the forests through District Forest Officers subordinate to Deputy Commissioners will prove the more advantageous.

Area and boundaries.

10. The forest area at the disposal of Government was at the close of the year 12,619,884 acres, divided as follows :—

	Acres.
1st class reserves	16,56,241
2nd „ „	107,78,573
Unreserved forest	1,85,070

These figures show the area of the 1st class reserves and unreserved forests to be more by 33,787 and 4,930 acres respectively, and that of the 2nd class reserves to be less by 5,870 acres. The apparent increase in the area of the 1st class reserves is mainly due to correction of areas previously estimated without the aid of a map. The actual increase was only 5,517 acres.

11. It has been stated by the Inspector General of Forests in his report for 1880-81 that, "the so-called 2nd class reserves are to all intents and purposes unreserved forests." Whatever may be meant by this statement it is as well to draw attention to the fact that they have been declared reserved forests under Act VII of 1878, and they have been protected against the acquisition of rights, an important matter in these Provinces, where the development of communications is likely materially to change the relative value of different forest areas.

Extension of permanent reserves.

12. In the review by the Government of India of the Forest Administration report for 1880-81, it is implied that extension of the 1st class reserves has been neglected. I would however submit that in the Nimar Division this matter has been practically disposed of, and that the early part of next year should see completed the separate demarcation of those areas, which, as far as can at present be judged, it is necessary permanently to maintain for the production of wood and bambus. See this office No. B27. of 7th June 1879, and remarks on this subject and demarcation in the Nimar Division.

In Chanda several forest blocks have been selected, and the only point under consideration, and which should not be hastily disposed of, is whether or not certain relatively poorly wooded tracts should be included or excluded. In the

past year the subject has been taken up in Raipur, while in Saugor it has not been neglected. In Jubbulpore the separate demarcation of one small block of forest as a permanent reserve was nearly completed at the close of the past year, and the demand on other forests and their sources of supply are being enquired into with the same object in view.

Boundaries.

13. The boundaries of the 1st class reserves have been referred to in detail in Chapter II, and such information as was available regarding the 2nd class reserves has been given in Chapter III. The length of boundary cleared during the year and that requiring clearing has not in all cases been returned, and hence a tabular statement on this subject is not given in this report, but it has been shown that the maintenance of the boundaries of the 1st class reserves is not neglected and that the demarcation of the 2nd class reserves is receiving attention. Except where the boundary lines run through bambu forests their maintenance necessitates but little expenditure. The actual outlay on demarcation during the year under report was Rs. 1,499-8-0, of which Rs. 600-5-2 was spent on the maintenance of boundaries in the 1st class reserves and Rs. 629-0-4, in the 2nd class reserves of Wardha, Nimar, Chanda, and Saugor. Much of the work of maintaining boundaries in the 1st class reserves is however done without special expenditure by the patrolling establishment, while where the boundaries form the limits of areas under fire protection the expenditure appears against the latter work. Of the expenditure above given Rs. 629-0-4 have been incorrectly classified under VIIIc—Surveys.

Protection and improvement.

Establishment.

14. The sanctioned staff of superior officers exclusive of the Conservator is :—

Deputy Conservators	...	6
Assistant "	...	6
Sub-Assistants and Probationers		4

There were, however, present during the greater part of the year—

Deputy Conservators 6, one officiating.

Assistant Conservators 10, one on probation, and two officiating.

Thus, including officers on furlough, the actual strength was above the present sanctioned scale. Of the 16 officers present, 2 were chiefly employed on demarcation work, one as an Assistant in the Conservator's office, the remaining 13 in the general management of the forests.

15. The sanctioned allotment for the conservancy establishment is Rs. 45,264, and the sanctioned scale is as follows :—

		Average salary.	Number.
Forest Rangers on	Rs.	67	22
Foresters on	"	23	39
Forest guards on	"	8	168

It must be admitted that the relation which the number of subordinates of the upper grade bears to the sanctioned scale of superior officers is not what it should be, but the present allotment does not admit of its being increased.

16. The permanent conservancy establishment was thus divided between the 1st and 2nd class reserves :—

		1st class reserves.	2nd class reserves.
Forest Rangers	...	11	11
Foresters	...	36	3
Forest guards	...	149	19

This establishment was supplemented by a temporary establishment costing Rs. 1,41,588 according to sanctioned scale, employed to ensure payments for produce removed and consequently charged to All, but which has in many cases been the only establishment available for protection, and which in the matter of preventing breaches of forest rules has every where taken part. Of the above amount Rs. 15,166 represents the cost of establishment sanctioned for the 1st class reserves and Rs. 1,26,422 the cost of that sanctioned for the 2nd class reserves, but in neither case has the expenditure equalled the cost as per sanctioned scale.

17. The cost of subordinate establishment may at first sight seem large, but it is small compared with the charges on account of superior officers, and it is certain that there have been but few cases in which the subordinate establishment has been strong enough for the work required of it.

Forest offences.

18. In the 1st class reserves 451 cases of breach of forest rules were reported. In 21 cases only involving 48 persons was prosecution resorted to. In 18 cases the conviction of 41 persons was obtained. In 3 cases the offenders were not detected, and in 427 cases the 427 persons concerned were allowed to compound. In the 2nd class reserves there is less certainty regarding the number of offences. According to the returns 8,779 forest offences were reported involving 13,833 persons. In 777 cases 1,194 persons were prosecuted and in 716 cases 1,038 persons were convicted. In the remaining cases the persons concerned compounded. From the foregoing figures it must not be implied that there has been any increase in the number of offences or any greater tendency to disregard the forest law, but there can be no doubt that the record of cases reported has been more complete, and that on the whole the arrangements for watch and ward have been better. It is certain that a large proportion of the cases were of a very petty nature, which has led to their being dealt with in the most lenient manner possible. As compared with the previous year the prosecutions and convictions have been as follows :—

Year.	Prosecutions.		Convictions.		Percentage of convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1880-81	904	1,770	815	1,554	90·2	87·8
1881-82	798	1,242	734	1,079	91·9	86·9

The percentage of convictions has been about the same as in the previous year. Possibly some of the acquittals resulted from deferred trial unavoidable in some forest cases.

Protection from fire.

19. Form 51 shows the area under protection to be 9,04,582 acres or nearly 20,000 acres less than the previous year; this however was not the case, for the area of the blocks in Wardha was incorrectly returned, and a clerical error in entering the area of one of the blocks in Nimar escaped notice. There was actually an extension of 12,680 acres, of which 2,000 acres represents part of the Lower Gour forest, and the remaining area is the eastern extremity of the Punassa reserve. The first of these extensions has as much for its object the making of revenue from grass, as the protection of the forest growth, the block being within 10 miles of the station of Jubbulpore. The extension of 10,680 acres in Nimar was to secure a river boundary, and as grazing was not stopped in this area it was attended with no additional risk. The extension was to some extent forced by the extension of the previous year. In fact for the past 3 years there have been few large additions to the area under protection except to secure better boundaries, the

grounds on which the Inspector General of Forests recommended the addition of the Sakata block added in 1880. Neither of these extensions would, however, have taken place had the orders of the Government of India been received before the Divisional Officer's proposals had been sanctioned.

20. Of the area under protection it will be observed that only 773,893 acres were successfully protected. It is true that the season was not favourable and that four forests in which difficulty in the matter of fire protection has always been experienced account for nearly the whole extent of failures, while those areas which first came under protection have remained safe, and it is also a fact that some of the failures resulted from the prescribed measures being neglected or imperfectly carried out. Still the fact remains that, of the area under protection, 130,689 acres were burnt over, which, though I am fully alive to the fact that the burning of a deciduous forest in these Provinces can only partially diminish the benefit that generally results from 5 or 6 successive years of protection, is decidedly unsatisfactory, and the fact points to defects in the system as at present practised.

21. The success that has been attained in certain forests and under certain conditions, and the results it has given even where fires have occasionally occurred has led to the system in force being over-rated. The unfortunate fact is that it is least adapted to those forests which Government is most desirous to improve, *viz* those that are most accessible and consequently at present least productive in tree vegatation. In this matter I am prepared to go further than does the Inspector General of Forests in para. 30 of the review of Forest Administration in the Provinces under the Government of India for 1880-81, and to state that by it perfect immunity from fires cannot be rendered sure, at least in the dry forests of these Provinces.

22. In the first place the very measures adopted for prevention are to a certain extent a source of danger not owing to imperfection in the system prescribed, but owing to the impossibility of relying on every official doing the right thing at the right time ; and putting aside this difficulty, except at a very high cost, it cannot render access to the forests except by fixed routes impracticable, while it affords no obstruction to the passage of fire carried by wind. For the latter purpose broad lines have to be resorted to, whereby fire tracing is rendered a greater source of danger.

23. Fencing and the raising of evergreen belts has hitherto been regarded as impracticable, but I am by no mens sure that they will not be fallen back on as the surest and in the end the most economical means of securing fire protection. At any rate I am of opinion that this should be fairly tried, and that until it has been tried the extension of the present system, except to protect a season's crop of grass for sale or small areas in which special works are carried out, should not be attempted.

Reproductive measures.

24. In most of the forest areas protection affords the widest field for improvement, and outlay on planting can only be justified in exceptional cases to supply special demands and in some cases to improve the composition of the forests. Expenditure incurred on this account has been charged to A VIII*d* or A VIII*f*, according as the work was the formation of a regular plantation or the stocking of small blanks or the addition of new species to an existing crop. The total expenditure under both heads was Rs. 8,545, but this sum also includes some petty charges on account of other works.

25. The chief operations were in Nimar and Saugor. In the Nimar Division the expenditure amounted to Rs. 4,137, but of this sum Rs. 480 represents the cost of cropping about 30 acres of land round the head-quarters of the Ranger at Kirgaon in the Khandwa reserve and near the forest rest house which it is desired to keep clear. This outlay was nearly covered by the receipts during the year. Rs. 524 were also spent on the cultivation at the same place of a stock of fruit trees which will soon return a good profit. Rs. 421 were spent on an

experiment in raising evergreen trees along the boundary in the Khandwa reserve, Rs. 489 on the maintenance of the Kirgaon nursery, and Rs. 1980 on the pitting of land and planting out. Of the latter amount Rs. 1,722 represents the cost of preparing 38,227 pits 3' × 2' × 2' arranged 8' × 15', but of these, owing to the sudden cessation of the rain in July, only 5,808 pits were stocked with plants. The plants put out were teak and bambu, but it is feared that the proportion that have succeeded is small: as however this place is so near the station of Khandwa planting should be continued but on a smaller scale till success is secured.

In Saugor the outlay amounted to Rs. 2,074, which represents the cost of maintaining nurseries, the protection and cultivation of a field of 50 acres sown in the previous year with bambu, the fencing of bambu previously put out, and the putting out in the natural forest of 67,000 bambu clumps of which 27,600 are reported as successful. The proportion of failures is large, but the results are sufficient to secure a good return for the outlay.

In the Chanda Division Rs. 592 were spent on the maintenance of a small forest garden at Moharli, the head-quarters of the Moharli Ranger, the cultivation and protection of some exotics planted in previous years, and planting out a few teak near Moharli.

In the Seoni Division Rs. 315 were spent in planting out teak and sissu in small blanks in the Nagulwari valley. The number of plants put out or the area is not noted in the Divisional report, but most of the transplants were fairly established at the close of last rains.

Of the outlay of Rs. 403 in Mandla Rs. 63 are debitable to the cultivation of exotics. The balance has been spent in raising "Katung bambu" in the Bunjar, and forming nursery beds for teak to plant out in parts of Jugmundal, where bambu at present dominates.

In Wardha Rs. 561 were spent on the protection of bambu nurseries and the ridging of land to receive the plants, but the District Forest Officer has not precisely recorded the extent of the work done.

A small sum was expended on similar works of minor importance in other divisions.

26. In the Bimarum reserve large saj were felled to encourage the growth of young teak and the further removal of the old crop where young teak is established in sufficient quantity is now being carried out on a small scale. Within limited areas in the Satpura, Rajaborari and Saonligarh reserves a small quantity of badly grown teak that would not improve was cut back to secure a better crop of shoots, but the outlay on such works was debited to A. I *a.*, as the material was collected for sale. In the plantation of the three years ending with 1871 at Baka on the Machna, thinnings were executed to improve the growth in the more advanced portion, and some of the frost injured trees were cut back, the remainder being left to afford shelter to the new shoots.

Works of general utility.

Roads.

27. In the construction of roads little has been done, the total outlay was Rs. 848-6-10, of which Rs. 558-3-10 were spent in improving the lines of communication in the Bunjar forest, Rs. 169-9-0 in repairing the ordinary country roads in the reserves of Hoshangabad, and Rs. 101-8-6 in connecting by road the rest house and Forest Ranger's quarters at Kirgaon in the Khandwa reserve with the nearest cart road.

28. On buildings was spent a sum of Rs. 2,409, of which Rs, 632 represents the cost of original works as follows :—

Completing construction of the Kirgaon rest-house with the exception of flooring, white-washing and painting wood work, Rs. 386.

Part construction of a Forester's and Guard's quarters and store-house at Kisli in the Bunjar forest, Rs. 246.

Rs. 202 were also spent in putting in repair a small pucka building at "Atar" made over to the department without charge and which is conveniently situated for a rest-house.

The rest of the expenditure was on account of repairs of buildings and subordinates' quarters and the construction of small temporary quarters for the establishment engaged in checking the removal of produce.

Other works.

29. Under AVIIc other works, the expenditure amounted to Rs. 1,889, of which Rs. 686 were spent on lining with masonry the well at Kirgaon excavated in a previous year, and Rs. 1,157 on improving the Nerbudda for timber transport between Mandla and Sakri. Surveys were made and plans and estimates put in hand for whatever other works may be necessary to bring these portions of the line of transit for the timber of most of the Mandla and some of the Balaghat forests into thorough working order, and these are now nearly completed.

Yield and financial results.

30. The extent to which the 1st class reserves have been worked and the protective restrictions in force have varied with the present requirements of each forest and the necessity of meeting special wants. The extraction of dead wood and such annual products as bambus and grass has been encouraged, and as far as practicable minor products have been utilized. In rare instances only is the crop of tree vegetation complete, and hence the cutting and extraction of green wood has as far as practicable been restricted except where the cutting back of the standing material would result in the production of a better crop or where a demand is desired to admit of thinnings now practicable. In the Bunjar and Bimarum forests only were there selection fellings, strictly so called; but in Bimarum the fellings were rather for the improvement of the young growth than for an out-turn of wood, the trees removed being of inferior species.

31. The yield of the forests has been given in the remarks on each Division, and the quantity of produce collected on account of Government and that removed by purchasers is shown in Statements 59 and 63, but these statements do not include produce removed under commutation, which is still in force with forest villages in the 1st class reserves and also in some of the 2nd class Reserves.

32. For the disposal of the annual yield the system of disposing by sale of fixed quantities standing in the forest is almost everywhere adopted, though in some cases the quantities covered by the payments are only limited by the requirements of the individual. Generally it is found expedient to lease the right to collect minor produce, and in exceptional cases to collect and bring produce to market on account of Government.

33. From the Government of India review of the Central Provinces' Forest Administration for 1880-81 it would appear that the collection of produce on account of Government had been unsatisfactory, that it had been unprofitable, and that in 4 years up to the close of 1880-81 over 500,000 cubic feet of timber had disappeared from the stock accounts without being accounted for.

34. It cannot for a moment be denied that in two undertakings within the past five years, viz. the supply of fuel to the Holkar Scindia and Neemuch State Railways and the supply of sleepers to the Nagpur and Chhattisgarh State Railway, the Forest Department has been unfortunate; but to secure a demand on the Punassa forest for fuel and to find the means of encouraging teak in Bimarum by the disposal of the inferior woods hitherto regarded as valueless, were regarded by the Inspector General of Forests when on his last tour as above all things desirable, and these have been the main objects of the two undertakings which therefore but a small profit suffices to justify.

35. As regards the fuel supply to the Holkar Scindia and Neemuch State Railway it may be said that the supply by this department was urged by the Government of Bombay, and that there was every reason to believe that the question of wood *versus* coal for working this Railway had been definitely disposed of. The question was, however, reopened and the demand stopped, suddenly changing what would have been a source of profit to one of loss.

36. As regards the supply of sleepers to the Nagpur and Chhattisgarh State Railway, as already reported, altogether exceptional difficulties arose which by loss of time caused and in other ways ran up the expenditure on the work and consequently diminished the profits obtainable, and well nigh brought the work to a standstill. These were unfortunate circumstances but do not detract from the merits of what has been done.

37. The supposition that 500,000 cubic feet were unaccounted for, resulted from the timber accounts not being understood. When timber on stock is converted the out-turn is obtained in a new form in which it must be brought on to the stock account, and consequently not simply the wastage but the gross quantity of material converted must be written off. This fact being overlooked also led to an incorrect impression regarding the quantity of material extracted.

38. As the results of the Departmental operations in the past year have been very favourable, I give a summary of the transactions for the past five years. The receipts under this head for this period have amounted to Rs 7,80,963. The expenditure for the same period under AI, AVI, and so much of the expenditure under AVII as has been incurred to facilitate timber transport where timber has been extracted by Government agency amounted to Rs. 6,39,915. Of this sum, Rs. 12,500 is on account of feed and keep of elephants not used in timber work, and Rs. 8,600 of permanent improvements in the means of transport calculated to last for an indefinite time cannot be debited to the 5 years' work, and therefore the sum under A. debitable to collection and extraction of produce by Government agency is Rs. 6,18,515, to which if Rs. 38,000, the largest possible portion of the B. charges that can be debited to such works, be added, Rs. 6,56,515 is obtained as the cost of Departmental operations, thus giving a profit of Rs. 1,24,448.

39. This is not a large sum to result from so large an outlay, and if the sole object were the making of immediate revenue, the result could not be regarded as satisfactory; but bearing in mind that the working of the Mandla forests cannot give a good profit until the system of communication between the forest and Jubbulpore is complete, that elsewhere the main object kept in view in Departmental timber operations has been the improvement of the forest growth and the enhancement of the value of produce standing in the forests, and that a large quantity of the material extracted had previously no value in the forests, while teak for the buoyage of heavy timber from Ahiri was purchased and paid for, it may fairly be said that in spite of the loss on fuel and the increased cost of sleeper works resulting from exceptional circumstances, the result of these transactions is not unsatisfactory.

40. The expenditure herein shown differs slightly from that in the Annual Statements for the years referred to, in respect of B and other charges which have to be apportioned, because in the Annual Statements all charges to facilitate timber transport were debited against the work of the year, irrespective of the period they were likely to cover, and moreover in apportioning charges to a considerable number of small works errors must occur; the A I charges are of course the same and so are those for purchase and feed and keep of stock.

41. The difference in the value of stock at commencement and close of the 5 years has not been taken into account, because owing to the annual timber accounts now including timber at sale depôts only, the figures could not be checked by reference to the accounts of 1877-78, still it is evident that the difference is in favor of the 5 years under reference.

42. To explain the figures referred to in paragraph 9 of letter No. 1039F. of 30th November last to the Chief Commissioner, Central Provinces, I furnish the following, showing the receipts and issues of timber according to the accounts for the past five years:—

			Cubic feet.
Opening balance on 1st April 1877		...	232,452
Add, receipts as per Timber Accounts up to 31st March 1882 ...		...	13,85,517
Total		...	16,17,969
Deduct, on account of excess debits by treating transfers as original receipts		...	36,476
Balance		...	15,81,493
Deduct, receipts by conversion		...	5,24,758
Gross quantity of timber to be accounted for		...	10,56,735
Deduct, wastage by conversion		...	1,94,467
Net quantity to be accounted for		...	8,62,268
Deduct used Departmentally		...	12,077
Balance		...	8,50,191
Deduct—			
Sales ...	4,55,780		
Absolute losses ...	18,501		
Difference on remeasurement ...	4,119		4,78,400
Balance on 31st March ...	...		3,71,791

The last balance will not agree with the annual timber account for 1881-82, because from this account is excluded all stock not at sale depôts. In the foregoing figures 4,50,236 cubic feet of fuel cut, the value of which in the forests would be at present nominal, have not been taken into account. If the relation of the balance of stock to sales be considered high, it may be noted that produce from the forests worked takes two seasons in coming to market, and consequently the stock on hand of marketable material should equal two year sales, and when, as in the present case, all the stock on hand is not in a marketable form it should be more; allowance must also be made for small losses. In the present case the sales of the past two years were in round figures 3,70,000 and the balance at close of last year amounts to the same figure.

43. It is now necessary to show the relation of the profits to the material sold. The profit on timber not measured by the cubic foot, almost entirely poles, resulting from improvement cuttings, may be taken at Rs. 30,000, that from fuel, bambu and minor produce a little less than Rs. 30,000, but deducting from the net results up to date Rs. 60,000 there is a sum of Rs. 64,448 to divide over 4,90,477 cubic feet, representing sales and losses, but exclusive of wastage in conversion as the original measurements were of timber as felled without any attempt at dressing or preparing for market. The profit on timber measured by the cubic foot falls therefore at the rate of Rs. 6-9-0 per ton. That this profit was worth having when more could not be obtained will scarcely be questioned; whether this was or was not a fair profit must be determined by the consideration of the following facts.

44. The great bulk of the material was extracted from forests more distant from a market than almost any in the Provinces; nearly the whole of the balance was drawn from a forest from which, for sound reasons, the means of transport still remains to be completed. From the Government forests has been extracted old sal timber found lying in the forest and much of which was of inferior quality and a small quantity of dead teak, while saj, felled to encourage the development

of young teak, made up the great bulk of the material obtained from Government forests. With the exception above noted the whole of the teak timber extracted was purchased from private forest as buoyage for the heavy timber from the Government forests. It has already been stated that at one time during the period under reference there were exceptional difficulties to contend with which probably ran up the expenditure by 25 to 30 thousand rupees. It is also a fact that but for the operations of this department the Chhattisgarh State Railway could not have been sleepered within the time it has, except at a considerably higher cost, while this State Railway has been supplied with material exceeding in value the debt acknowledged and paid to this department by over Rs. 40,000, representing a clear gain to the State, though not to the Forest department.

45. Leaving the last three facts out of account, and considering only the position of the forests worked, the class of material obtained from the Government forests and that nearly all the more valuable wood was purchased, it must I think be admitted that the profit though small is not unsatisfactory. Better results were however anticipated, and would doubtless have been secured had it not been for circumstances which are not likely to recur. It is far from improbable that the current year's transactions will materially raise the average profits.

Receipts and Charges.

46. The revenue and expenditure of the year is given in full detail in Form No. 53.

The totals are—

Receipts	... ..	Rs. 11,72,884
Expenditure ...	A. 3,17,743	
	B. 1,79,270	
	Total ...	4,97,013
	Surplus ...	6,75,871

It has been stated in the remarks on the Chanda Division that part of the Rs. 2,67,027 derived from the Ahiri Sub-Division resulted from the outlay of previous years; still a large surplus has resulted from the transactions of the year. The actual progress in the development of the revenue and surplus can best be measured by comparing the average of the four past periods of three years which are as follows:—

		Receipts. Rs.	Charges. Rs.	Surplus. Rs.
1870-71 to 1872-73	...	5,29,152	2,62,305	2,66,847
1873-74 to 1875-76	...	6,51,827	3,16,186	3,35,641
1876-77 to 1878-79	...	7,32,699	3,33,344	3,99,355
1879-80 to 1881-82	...	10,09,915	5,05,033	5,04,882

47. Divided between the 1st and 2nd class reserves, the receipts and charges stand thus :—

		1st Class reserves. Rs.	2nd Class reserves. Rs.
Receipts	...	4,15,679	7,57,205
Charges	...	2,55,530	2,41,483
	Surplus	1,60,149	5,15,722

48. The receipts from the 1st class reserves are not wholly creditable to the past year's work, about Rs. 1,20,000 resulting from work done in the previous year. Deducting this amount the surplus is small. The 1st class reserves in Mandla show a deficit of Rs. 13,438, and it is scarcely possible that this Division can return a surplus under two years, as without further improvement of communications, the full yield of even one of the more productive forests cannot be brought to market. Elsewhere the income from the 1st slass reserves has almost without exception risen, and some of these forests are now returning a good surplus.

49. From the 2nd class reserves has been derived the goodly income of Rs. 7,57,205, and a surplus of Rs. 5,15,722. In considering the relation of the surplus to the total income, it is necessary to bear in mind, that generally speaking, the rates at which the wants of the people have been supplied, have been extremely low, which of itself makes the relation of expenditure to revenue higher. The prevalence of low rates, however, only renders the results more satisfactory, for it renders more sure the rise of the income with the general advancement of the Provinces. Every district shows an increase of revenue; the rise has been most marked in Chanda, Damoh, Hoshangabad, Saugor, Mandla, Bilaspur, Raipur and Balaghat, which returned from Rs. 4,000 to Rs. 15,000 more than in the previous year, while in Bhandara and Wardha only was the increase less than Rs. 1,000.

50. In Form 57 the expenditure has been classified under three main heads as required by the Government of India. An abstract of this form is given below :—

Particulars.	Receipts.	Charges.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
I.—Departmental timber operations ...	3,10,176	1,38,313	1,71,863	...
II.—Other revenue ..	8,62,708	2,21,152	6,41,556	...
III.—Formation, protection, and improvement of forests ...	...	1,37,548	...	1,37,548
Total ...	11,72,884	4,97,013	6,75,871	...

In accordance with paragraph 208 of the Forest Code, all the expenditure charged to Budget Head AII, has been placed against revenue from produce removed by purchasers, but as the establishment charged to this head though employed for the purpose of securing the realization of the value of produce removed by purchasers, is in many cases the only agency available for the protection of the forest, it is evident that this expenditore is not wholly debitable against revenue.

CHAPTER II.

1st CLASS RESERVES.

DIRECTION DIVISION.

Area and boundaries.

51. No officer of the controlling staff being available, the Conservator has had to retain the control of the two small reserves of Hathibari and Kantera nala with an area of 5,671 acres. These forests, situated as they are, are too small to afford the establishment necessary for successful administration, and it is hoped that ere long they will be included in one large block by the contemplated extension of the permanent reserves in Raipur. The boundaries of both reserves have been properly maintained.

Protection and improvement.

52. No forest offences were reported.

53. The Hathibari reserve continued safe from fire, the outlay on this account being Rs. 81-4-8. In Kantera nala fire protection was a failure.

54. Except for dead wood, bambu and grass, of which a very small quantity was removed, these forests were closed. There was a small outlay of Rs. 52 on sowing teak and other useful species in blanks.

55. On the propagation of lac there was a small outlay of Rs. 31-1-8, resulting in the production of a little over 14 maunds which was not sold before the close of the year.

Financial results.

56 The receipts from these two reserves only amounted to Rs. 102, while the expenditure was Rs. 1,367. The expenditure could not be justified were it not that some portions of Hathibari are rich in teak, while there is an area of about 80 acres more or less stocked with artificially raised teak, which, though, owing to imperfect drainage, it has not come on really well, is still worth protection.

MANDLA DIVISION.

57. It being found impracticable to spare a Gazetted Officer specially for the Jubbulpore Division, the charge of the reserves of Singrampur and Bijeragogarh was combined with that of the 1st class reserves in the Mandla Division.

Area and boundaries.

Area.

58. The area of the 1st class reserves has been increased by the transfer from the 2nd class reserves of the Lower Gour forests, with an area of 5,517 acres, which took place at the close of the year.

In the demarcation of this forest several disputed points had to be disposed of and the demarcation was not quite finished at the close of the year.

Boundaries.

59. Omitting the Lower Gour forest, the total length of the boundaries is 303 miles. Of this length nearly 30½ miles is defined by rivers ; the remaining length by cleared lines and 812 boundary marks. The clearing of boundaries is carried on as found convenient during the dry season. Shortly after the close of the official year all boundary lines were reported as clear and in good order. Of the boundary marks 130 were at the close of the year in want of repair. The cost of maintaining boundary lines in the Bunjar, Jugmundal, Airi, Chuharigogarh, Barela, Motinala, Bijeragogarh and Singrampur, which with the burning amounted to Rs. 700, was charged to fire protection. In the remaining three reserves the cost of maintaining boundary lines has been about Rs. 80.

Protection and improvement.

Watch and ward.

60. The establishment subordinate to the Divisional officer available for protective purposes consisted of one Forest Ranger, who assists as a Sub-divisional officer in charge of three

ranges, nine Foresters and 34 Forest Guards. The men of the last two classes were distributed as follows:—

Class.	Number of men in each range.										
	Bunjar.	Halone.	Pheyne.	Jugmundal.	Chuharigogarh.	Airi.	Barela.	Lower Gour.	Bijeragogarh.	Singrampur.	Total.
Forester ...	2	1	1	1	...	...	1	1	1	1	9
Forest Guard ...	6	2	5	5	2	1	3	2	5	3	34

Considering that the forest area of 350 square miles consists of 15 detached forests or blocks varying from 3 to 78 square miles each, this is not a strong establishment, but it has nevertheless been sufficient for ordinary protection, which has been complete.

Forest offences.

61. There were only 19 cases of breach of forest rules, in which 50 persons were involved. In 4 cases 9 persons were prosecuted, with the result that in 2 cases 5 persons were convicted, the trial of one offender remaining pending at close of the year. In the remaining cases the offences were compounded.

Protection from fire.

62. The only increase in the area under fire protection for several years is represented by the most promising portion of the Lower Gour forest, within 10 miles of the station of Jubbulpore. Apart from other conditions, it is expected that all grass here preserved will be freely brought up and removed. More need scarcely be said in justification of the extension. The following Statement shows the extent of work under this head and its cost:—

Forest.	Area in acres.		Cost of area actually protected.						
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	a.	p.	Rs.	a.	p.	
Bunjar valley	49,425	49,490	589	4	2	7	9	11	2·286
Montinala	1,659	1,659	56	10	0	21	13	5	6·553
Jugmundal	24,503	24,346	540	4	3	14	3	8	4·262
Chuharigogarh	1,661	1,661	71	5	0	27	7	7	8·243
Barela	7,153	7,153	152	[illegible]	0	13	10	0	4·088
Bijeragogarh	21,188	21,188	487	5	3	14	11	6	4·416
Singrampur	6,555	6,550	134	12	9	13	2	8	3·950
Airi	2,150	2,150	39	3	9	11	10	10	3·504
Lower Gour	2,000	2,000	71	14	9	23	0	2	6·904
Total ...	1,16,364	1,16,191	2,143	0	11	...	...	...	...
Average for Division ...						11	12	10	3·541

It will be observed that protection was almost complete. More cannot reasonably be expected.

63. The areas under protection from fire were closed against grazing.

64. In Barela and Jugmundal under the influence of fire protection the forests are fast improving. In Jugmandal among other trees a vast number of young teak have now attained a size beyond the possibility of destruction by fire. In both these forests Sirali (Nyctanthes arbor-tristis) is proving in parts a valuable nurse for other species. In Singrampur good results are also observable, though here the effect of fire protection is in parts modified by the effect of frost. In Bijeragogarh very marked progress in reproduction is reported, though from measurements recorded, the growth on the ground when protection commenced, has not developed very favourably. In the Bunjar the effect of fire protection has been much modified by the two years of exceptional frost but recently experienced ; still the conclusion is irresistable that where frost has not caused injury there is more vigor in the standing crop, while it is certain that large numbers of seedlings have been preserved from destruction.

65. Two small forest areas that had been accidentally burnt after several years of successful protection were in the past year closely examined, and the conclusion drawn was that, though in such cases fire may do more damage than in areas that have not been protected, as a rule, it can only, to a very limited extent, modify the benefit that has resulted from previous protection.

66. For the improvement of the forests little else was done. In Jugmundal, some seed beds were formed to raise teak seedlings to be planted in belts in the bambu forest where there is a deficiency of that species, but it will not be till the rains of 1883 that a good crop of seedlings will be available. This method of planting teak in broad bands between belts of natural forest was found very successful in Moharli. In Jugmundal the nature of the ground being different, it is only an experiment on a small scale to test the cost at which those portions of the forest which must be classed as pure bambu forest may be converted into teak forest with bambu as an undergrowth. A fair stock of seedlings of Katung bambu was also raised in the Bunjar for planting along sheltered water-courses. In Singrampur, over a small area of 18 acres all badly grown or injured teak and other valuable species were cut back to the ground with a view to securing a crop of shoots which with the moderate shelter afforded by trees left standing should shoot up and out-top the old crop.

Other works of improvement to facilitate the management and working of the forests.

67. Good quarters for the forester in charge of the Bunjar were much needed, and a sum of Rs. 354 was sanctioned for the construction of a four roomed building at Kisli to serve as a store house and residence for the forester and a forest guard. The work was put in hand but was not completed before close of the year. Rs. 246-6-4 represent the charges on this account during 1881-82. On the maintenance of forest rest-houses and nakas there was an outlay of Rs. 335-7-1.

68. In paragraph 43 of the provious year's report the completion of the passage at Premadhar, on the Nerbudda, by cutting and walling at a cost of Rs. 2,579 was noted. The work has answered well, but it has been found expedient to render more vertical the lower portions of the sides of the cutting, and for this purpose a sum of Rs. 315 was sanctioned, but owing to the flow of water the work could not be completed before close of the year. The original plans and estimates for improving the means of transport at other places between Mandla and Sakri have had to be modified, but revised plans and estimates are now nearly ready.

69. On the improvement of road communication in the Bunjar forest there was an outlay of Rs. 558-3-6.

Yield and Working.

70. The following Statement gives the yield of the forests reduced by the Divisional Officer to tons:—

Sal timber.	Teak timber.	Wood of other kinds.	Firewood.	Bambus.	Hurra.	Takur.	Stag horns.
374·44	19·57	9·00	173·30	239·00	31·58	1·32	0·61

The number of cattle grazed during the year was as follows:—

Buffaloes	...	No. 676
Cows and bullocks	...	„ 12,147
Ponies	...	„ 2

71. The demand on most of the forests is still small, but it is satisfactory to observe that larger sales of fuel have been effected from Barela and Singrampur and that a demand on the former forest for bambus appears to be springing up.

Hurra was collected on account of Government at something under 4 annas per maund, but the whole stock was not sold before the close of the year. The right to collect lac in Singrampur was leased. Other minor produce which was not likely to be removed on payment was collected on account of Government, the collectors being allowed a share of the produce.

Timber operations.

72. The departmental timber operations have been almost entirely confined to the extraction of timber from the Bunjar forest; they have necessarily been on a small scale, as the means of transport are yet incomplete as shown in paragraph 68 of this report. The actual work done and its cost is given below:—

Particulars.	Pieces.	Cubic feet.	Cost.			Rate per cubic foot.	
			Rs.	a.	p.	As.	Pies.
Sawing scantlings	7,027	18,204	3,479	11	9	3	0·70
Carting logs and scantlings from forest to Mocha ...	6,632	16,594	2,244	2	2	2	1·97
Floating logs and scantlings from Mocha to Mandla.	6,386	12,748	813	5	7	1	0·25
Floating scantlings from Mandla to Burridhar ...	5,070	11,520	930	9	9	1	3·51
Floating scantlings from Burridhar to Gwarighat ...	5,537	15,551	2,703	8	7	2	9 38
Carting scantlings from forest to Chisgaon ...	594	891	445	8	0	8	0·00

The last item is for produce in transit south towards Nagpur, the remaining items in order as they occur from the Bunjar to the sale depot near Jubbulpore.

It is believed that in respect of the 4th and 5th section of the work the charges in the past or previous year were not accurately divided, each section including part of the 7 miles from Mandla to Sakrighat, which really is at present the most costly sections. No timber was taken through from the forest to Gwarighat in the log, but it is worthy of note that scantlings of 50″ cross section have now been landed at the Gwarighat sale depot from the Bunjar at Rs. 0-8-7 per cubic foot including the cost of sawing and the cost of the temporary establishment, by which the work is almost entirely conducted.

73. The difficulty of obtaining hired carriage for work in the Bunjar is steadily diminishing, and thus the charges for bringing timber to river have diminished ; small scantlings such as can be carried on ordinary country carts are now being transported at one pie per cubic foot per mile, a sufficiently moderate rate. The opening of the Premadhar passage has also caused some saving, but its full benefit will not be realized till the passage of the Kurur has been improved.

74. The stock of dead timber in the Bunjar being almost entirely exhausted, the felling of 700 green trees per annum has been sanctioned, and the first cutting has been commenced in a well defined block on the banks of the Leela.

Doubtless a larger number of trees might be removed annually, but the fellings can be increased, as a more perfect knowledge of the capabilities of the forest is acquired. In the present there is the additional reason for restricting the fellings, *viz* that the forest is surrounded by a more or less wild tract of country in which the supply of carriage is limited and is only likely to increase slowly with the means of the people and as the requirements of the Forest Department furnishes employment for slack times. The country is one in which carts are not the ordinary means of tranport, but there is reason to believe that since the operations of the Forest Department commenced, the supply of this class of carriage has been slowly increasing. To import carts from a distance for work in this forest would not be profitable, and it is not desired to keep up more Government carriage than is sufficient to regulate rates.

75. As the timber from this forest takes two years in coming to market, as it will continue to do until communications between Mandla and Sakrighat have been completed, and as the supply, owing to its being obtained from dead timber scattered throughout the forest, has not been regular, it is difficult to show the actual result of these timber transactions. The receipts from timber fuel and bambus sold at depot amounted during the past year to Rs. 22,881, while the charges against the collection and bringing to depot of such produce for the same period exclusive of such charges as must be incurred whether or not departmental timber operations are undertaken and exclusive of those charges on account of works calculated to serve for a long series of years, but inclusive of the cost of feed and keep of cattle and all temporary charges on account of repairs of roads and carts as well as the cost of establishment specially employed on the timber works, amounted to Rs. 12,317. In the figures last given has been included a sum of Rs. 605, appearing in the transactions of the year but debitable to previous year.

76. What has been done in the matter of timber operations and working the forests of this Division is strictly in accordance with the views of the Inspector General of Forests as expressed in his inspection reports of 1876, and though the Government of India has been pleased to comment unfavourablyon the result of timber operations in the Central Provinces, I can with confidence look forward to its recognizing at no distant period that the action taken in this matter has been sound.

Financial results.

77. The following Statement exhibits the receipts and charges against the different reserves .—

Range.	Receipts.	Expenditure. Executive, protective and other charges wholly debitable to particular forest.	Expenditure. Control and other charges not wholly debitable to any particular forest.	Expenditure. Total.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bunjar	20,833	16,656	2,647	19,303	...	1,530
Topla	368	699	1,324	2,023	1,655	...
Keolikapa	291	315	883	1,198	907	...
North Pheyn	168	334	883	1,217	1,049	...
South Pheyn	1,139	379	1,324	1,703	564	...
Motinala	63	383	442	825	762	...
Jugmundal	61	1,556	1,324	2,880	2,817	...
Chuharigogarh	760	386	441	827	67	...
Ahiri	11	214	441	655	644	...
Barela	585	1,277	882	2,159	1,574	...
Lower Gour	54	623	441	1,064	1,010	...
Bijeragogarh	351	1,817	1,323	3,140	2,789	...
Singrampur	1,350	1,164	1,323	2,487	1,137	...
Total ...	26,035	25,803	13,678	39,481	13,446	...

Of the total outlay a sum of Rs. 605-9-4 is debitable to previous years, while Rs. 1,595-5-1 represents the outlay on permanent works, of which but a nominal portion is debitable to the past year.

The receipts from the Bunjar forest were less than in the previous year, as the material available for sale from the old cuttings of previous years which only has as yet been brought into market, has been of less value.

78. The reserves of Topla, Keolikhapa, the North and South Pheyn and Motinala have not paid, because improvements in communication necessary for their profitable working have not yet been attempted. Jugmundal has not paid, as it has not yet been considered expedient to commence felling the limited quantity of teak timber that the improvidence of former years has left standing, and 16 years of fire protection has not been sufficient to produce material marketable in this locality, though it has vastly improved the condition of the forest and increased its value. In the reserves of Singrampur, Barela and Bijeragogarh there has in the past year been a little extra expenditure on supervision, incurred with the view of increasing the income from them without sacrifice of their productive power.

The effect in the past year was to add Rs. 1,000 to the receipts, and the current year will doubtless show better results, though for the present minor and inferior produce and bambus are the only legitimate sources of revenue. Neither Ahiri nor Chuharigogarh are at present workable : the revenue credited to the former resulted from dead teak brought out in the previous year.

HOSHANGABAD DIVISION.

Area and boundaries.

79. In the area of the 1st class reserves there has been no change, though in Form No. 49 the area of Saonligurh originally roughly estimated has been corrected.

Area.

80. Where the boundary forms the limits of the areas under protection from fire, the boundary lines are cleared annually; elsewhere the lines being maintained for demarcation only are cleared once in three years, that is to say, any shoots from stools that have sprung up within that time are removed. The total length of boundary in the 3 reserves is 276 miles, of which 14 miles are formed by rivers, the remaining length is artificial. The length of boundary lines cleared during the year was a little over 129 miles. Besides the boundary line which is the chief means of demarcation there are 1,119 boundary marks, of which 340 are more or less in need of repair, while one masonry pillar having been washed away requires to be replaced.

Boundaries.

Protection and improvement.

81. The Rajaborari reserve is divided into four sub-ranges and the Saonligurh reserve into three.

82. The establishment available for the protection and management of the forests was as follows:—

Watch and ward.

Forest.	Permanent.			Temporary.	
	Forest Ranger.	Foresters.	Forest guards.	Duffadars.	Watchers.
Bori	...	1	2	...	3
Rajaborari	...	2	5	1	9
Saonligarh	1	1	6	1	3
Total ...	1	4	13	2	15

The establishment though strong enough for protection and conservation is now found insufficient for these duties combined with the collection of revenue and sale of licenses, for which purpose 4 or 5 special men will have to be temporarily entertained.

83. Eleven cases of breach of forest rules were reported. In one case the offender was prosecuted and convicted. In the remaining cases the 10 offenders were allowed to compound. The number of offences reported is extremely small, but I am not disposed to believe that no more occurred; taking into account all the duties that devolve upon it the establishment is not strong enough to render sure the detection of all offences.

Forest offences.

84. In the area under fire protection there has been no extension since 1879-80.

Fire protection.

The following Statement shows the result of the past season's work :—

Range.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	A.	P.	Rs.	A.	P.	Pies.
Bori	39,680	36,806	673	4	3	11	11	4	3·513
Rajaborari	102,720	102,070	518	11	2	3	2	4	0·975
Saonligarh	70,251	56,811	301	11	7	3	0	8	0·914
Total ...	2,12,651	1,95,681	1,493	11	0				
Average for the Division ...						4	14	1	1·465

85. On the Conservator's visit to the Division it was found that the measures prescribed for fire protection had not been properly carried out: for this the subordinates are in a measure responsible, but it was as much due to imperfect control, the cause of which was that the Divisional officer was too much absorbed with the administration of the 2nd class reserves, which he records left him little time to visit the 1st class reserves.

86. Of the area under protection from fire 27 square miles in Rajaborari and 12 square miles in Saonligurh including the areas in which regular cuttings and sowings were made were closed against grazing, while in the Bori forest no grazing was allowed except for the few cattle owned by the inhabitants of the villages of Dhain and Junkur, situated in the western portion of the reserve.

Other improvement.

87. Seed of useful species was in some cases sown without special expenditure by the regular establishment and on a very small scale, the cutting over of badly grown teak and the thinning of clumps of teak shoots was carried on in the Ajnal and Dhakna blocks, but practically the work of improvement has been confined to fire protection, which I regret to record was not carried out as it should have been.

88. The regrowth of teak in previous years' cuttings continues to make good progress, and it now appears that the efforts made in previous years to stock blanks by broad-casting seed and sowing in ploughed lines or roughly prepared plots, though they have not resulted in full crops, have at least resulted in the production of a very large number of seedlings where the ground would otherwise have remained bare except of grass. The condition of the forests generally is improving; it is most marked by the increase in the size of the bambus that the forests now yield.

Yield and working.

89. In the past year there was no change in the arrangements for working these reserves. Almost all the produce removed was taken by purchasers direct from the forest. The departmental operations were practically confined to the limited cuttings referred to in paragraph 26, and the dressing of some wood resulting from the previous years' cuttings.

90. The following is a Statement of the yield of the forests:—

Forest.	Teak.			Other wood for building and agricultural implements.					Firewood.			Bambus.	Grass.			
	Cubic feet.	Logs.	Poles, &c.	Poles and pieces.	Joti load.	2 bullock cart load.	4 bullock cart load.	Head load.	2 bullock cart load.	4 bullock cart load.	Head load.		Pulas.	2 bullock cart load.	4 bullock cart load.	Head load.
Bori	...	...	8	2	...	5	3	...	...	...	...	17	...	...	...	...
Rajaborari ...	563	311	1,329	143	684	359	7	209	679	48	610	2,51,824	..	1,040	19	770
Saonligarh ...	...	9	2,329	153	...	323	45	...	501	82	1,052	2,10,032	12,125	497	46	530
Total ...	563	320	3,666	298	684	687	55	209	1,180	130	1,662	4,61,856	12,125	2,437	65	1,300

As compared with the previous year the outturn of timber has been greater, though owing to the cutting of teak being restricted it was proportionately of less value. The outturn of fuel though still small has increased, that of bambus has nearly doubled, while, thanks to protection from fire, incomplete though it has been, a much larger quantity of grass has been supplied to the people. The increase in the outturn of bambu is partly due to the improvement in the growth of this product having attracted purchasers from a greater distance; purchasers now coming from villages in Holkar's territory, quite 100 miles distance to the Rajaborari reserve. It is satisfactory to note that in the past year for the first time a few purchasers resorted to the Bori forest to obtain poles of tinnus and other woods. Only a few cartloads were taken, but once the forest has been tapped in this way the demand is sure to increase.

91. The number of cattle grazed was as follows:—

Buffaloes ...	...	No. 6,183
Cows and bullocks	...	,, 35,089
Sheep and goats	...	,, 487

Financial results.

92. The receipts and charges in the different reserves were as follows:—

Range.	Receipts.	Expenditure.			Surplus.	Deficit.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bori	291	1,505	585	2,090	...	1,799
Rajaborari	16,736	3,088	2,536	5,624	11,112	...
Saonligarh	8,761	2,201	1,521	3,722	5,039	...
Total ...	25,788	6,794	4,642	11,436	14,352	...

The income has not risen in the same proportion as the outturn of material, because less teak was cut; nevertheless the past year shows a further rise of Rs. 460 in the receipts. Omitting control charges, which are liable to vary according as the charge of the division is held by a junior or senior officer, the surplus of 1881-82 is larger than that for the preceding year. Considering the time taken up in the administration of the 2nd class reserves, the debit on account of control charges is perhaps too high. These charges have been apportioned according to area, revenue and expenditure.

BETUL DIVISION.

Area and boundaries.

93. The area of the 1st class reserves is the same as at the close of 1880-81.

Area.

94. The Khamapur boundary line, 178 miles in length, requires reclearing. That of Bowergarh, 72 miles in length, was cleared in 1881-82. A large landed proprietor owning land bordering on and in Bowergarh has for some time been anxious to exchange these lands for others of greater value elsewhere, but his proposals have been too unreasonable to be entertained; likewise in Khamapur exchanges are now desired which, when suggested by me 15 years ago, were rejected. A rectification of boundary in this case by exchange of land may prove advantageous, and the matter will be carefully looked into next season.

Boundaries.

Protection and improvement.

95. The establishment engaged in the management and protection of the forest as well as the sale and disposal of produce was as follows :—

Establishment.

Forest.	Permanent.			Temporary.	
	Forest Ranger.	Forester.	Forest guards.	Daffadars.	Peons.
Bowergarh	...	1	5	...	3
Khamapur	1	...	5	1	5
Total ...	1	1	10	1	8

The foregoing establishment has also to look after 16 blocks of 2nd class reserves aggregating 24·5 square miles.

96. Thirty-four cases of breach of forest rules were reported. In 2 cases 2 persons were prosecuted and convicted, in 29 cases the offenders compounded, while in 3 cases the offenders were not detected.

Forest offences.

97. The same areas as in the previous year were under protection. The result of the season's work and its cost is shown in the following Statement:—

Fire protection.

Forest.	Area in acres.		Cost of area actually protected.								
	Under protection.	Actually protected.	Total.			Per square mile.			Per acre.
			Rs.	A.	P.	Rs.	A.	P.	Pies.
Bowergarh	38,720	28,054	616	0	0	14	0	10	4·216
Khamapur	16,000	16,000	247	2	9	10	6	6	2·966
Total ...	54,720	44,054	863	2	9				
Average for the Division ...						12	8	7	3·762

It will be observed that the Bowergarh area has again been conspicuous for forest fires. These fires, no less than 4 in number, did not result from any defect in the arrangements for protection, which had been thoroughly carried out. Nor can it be said that there was want of vigilance on the part of the establishment. A liberal reward has been offered for information that will lead to conviction of the orginators of these fires, and it has been considered expedient to refuse licenses for grazing or forest produce to the inhabitants of the two villages adjoining that part of the forest which has been the seat of forest fires.

98. With the exception of a certain portion of the Bowergarh block, the areas under protection from fire were closed against grazing

99. In a part of the Baka plantation thinnings were carried out to give more space to the teak and also to encourage the growth of other species; this being originally a pure teak plantation. In parts where the trees had been injured by frost a certain proportion were cut back with the view of obtaining a straight and vigorous growth, the remainder being left as nurses, or if found expedient, to be cut back later on.

Other works of improvement.

100. A small beginning has been made without special outlay in raising evergreens on the inner edge of the boundary line, of 217 mangoe trees thus planted out 146 are thriving. As the lower subordinates get into the way of carrying out such plantings successfully they will it is hoped be extended, and it may then be expedient to sanction some special outlay for such work, the advantage of evergreens along the outer edge of the forests being very great.

101. A cart road was projected from Katawari to Kukra as an outlet to encourage the demand for forest produce as well as other purposes, but its construction had not been commenced before the close of the year.

Roads.

Yield and working.

102. There was no change in the arrangements for working these forests. In the areas under fire protection the cutting of grass and bambu and collection of minor produce has been allowed, while the remaining area has also been opened for the cutting of wood other than of the more valuable kinds.

103. In the following Statement the yield of the forests is given :—

Forest.	Teak poles.	Wood for building and agricultural purposes.				Fuel.		Bambus.	Grass.		
		Pieces.	Cart load.	Joti load.	Head load.	Head load.	Charcoal. Head load.		Cart load.	Bullock load.	Head load.
Bowergarh ...	...	362	182	257	1,319	13,010	24	13,342	105	33	776
Khamapur ...	60	...	60	490	1,017	10,160	32	17,659	67	...	190
Total ..	60	362	242	747	2,336	23,170	56	31,001	172	33	966

The outturn has been somewhat larger than in the previous year though still small. Though a somewhat smaller number of bambus were removed the demand for forest produce on the Bowergarh reserve at least has increased.

104. The number of cattle grazed during the year was as follows :—

Buffaloes	... No.	5,123
Cows and bullocks	... „	15,398
Ponies and donkeys	... „	120
Sheep and goats	... „	1,160

Financial results.

105. The following Statement exhibits the receipts and charges of the year :—

Range.	Receipts.	Expenditure.			Surplus.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Bowergarh	4,940	1,870	1,036	2,906	2,034
Khamapur	5,710	2,217	1,289	3,506	2,204
Total ...	10,650	4,087	2,325	6,412	4,238

The income from Khamapur is only a trifle above that of the previous year, while that from Bowergarh has risen by Rs. 1,400.

106. As soon as the boundaries of the 2nd class reserves have been properly checked it will be expedient to place on the footing of permanent reserves the forests bordering the open country between Betul itself and the Chhindwara border and also the forests lying along the Berar border. These must for some time be the most paying forests in the Division.

NIMAR DIVISION.

Area and boundaries.

Area.

107. The area of the 1st class reserves is the same as at the close of the previous year, though with a view to putting the more important portions of the remaining Government forests area on the footing of 1st class reserves, the checking of boundaries was systematically carried on.

Boundary.

108. The length of boundary of the reserves is 314 miles, of which 85 miles are defined by rivers. The Divisional Officer was too closely occupied with demarcation work in the 2nd class reserves, with the view to the extension of the permanent reserves, to visit Kalibhit. In the other reserves the boundaries were all cleared.

Protection and improvement.

Establishment.

109. The following Statement shows the strength and distribution of the subordinate establishment employed in protection as well as the collection of the revenue :—

Name of Reserves.	Permanent.			Temporary.	
	Forest Rangers.	Foresters.	Forest guards.	Duffadars.	Peons.
Kalibhit	1	...	2	3	8
Punassa	1	1	6	1	8
Chandgarh		1	2	1	4
Khandwa	1	2	4	2	9

This is a fairly strong establishment, but all the temporary posts have not been continuously filled. The Khandwa reserve, from its position in reference to the market, requires a strong establishment. While in Chandgarh and Punassa a closer watch is necessary in consequence of these forests bordering on Native states.

Breach of forest rules.

110. There were reported 137 cases in which 140 persons were accused of forest offences. In 129 cases the offenders compounded, while in 8 cases 11 persons were prosecuted, with the result that in 8 cases 10 persons were convicted.

Protection from fire.

111. In Kalibhit, Punassa and Chandgarh nothing was attempted for the improvement of the forest beyond protection of the growing stock and protection from fire. In the Khandwa reserve protection from fire was continued, but owing to the serious failures of the preceding year the attempt to improve the composition of the forest and fill up blanks by planting was limited.

112. The following Statement shows the work attempted in fire protection, the result and its cost :—

Forest.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. a. p.	Rs. a. p.	Pies.
Kalibhit	62,080	61,811	254 15 9	2 10 2	0·792
Punassa	91,720	7,110	954 8 4	85 14 8	25·776
Chandgarh	61,440	54,145	697 15 4	8 4 1	2·477
Khandwa	35,840	33,584	638 2 5	12 2 6	3·648
Bainpura	600	600	12 0 0	12 12 9	3·840
Ganjari	3,500	3,500	20 1 6	3 10 9	1·102
Undria Baoria	3,100	3,092	18 0 0	3 11 6	1·117
Bhojwa and Beheria	2,000	2,000	31 9 1	10 1 7	3·030
Ajiral	1,500	1,500	26 4 0	11 3 2	3·360
Chaoria	170	170	.....	.....	...
Total ..	2,61,950	1,67,512	2,653 8 5		
Average for the Division			... ...	10 2 2	3·041

The six last areas in the above statement are still 2nd class reserves, and are only included here because they were supervised by the same establishment as is employed in the Punassa and Khandwa reserves.

113. Again Chandgarh figures as the forest in which protection from fire was not successful. The fire in Chandgarh was unquestionably due to the negligence and misconduct of a lower subordinate. This man should, and had he been brought to trial, certainly would have been made an example of. He remained present at Punassa for 10 days after issue to the Police of the warrant for his arrest and then escaped into foreign territory before the warrant was executed. The area burnt in the Khandwa reserve is, with the exception of a few acres, along the boundary; and resulted chiefly from carelessness in line burning. The originator of a small fire in Kalibhit was prosecuted and punished. Against two men who were concerned in a small fire in Punassa warrants were issued; one of these was caught by a Forest official and brought to justice, but the chief offender escaped into foreign territory.

114. The fire which proved so disastrous in Punassa was due to a whirlwind, which carried fire across the boundary, lighting the forest in three places at once; second, to the failure of the people of Punassa, in whose village area the fire originated, to render reasonable assistance; and lastly, to a furious storm of wind which ended in loss of life as reported in this office No. B. 24 of 20th May 1882. In the first instance had the people of Punassa behaved well, the fire would not have extended over more than one or two hundred acres; and notwithstanding this failure in the first instance the fire would still have been kept within a comparatively small area had it not been for the storm of wind that sprang up just as assistance arrived. Such was the fury of this storm, which of course carried the fire before it, that, notwithstanding the assistance afforded by a cleared path, all present could not out-strip the fire. It is chiefly to be regretted that this was not fully realized at the time, and that the order of the Forest Ranger to stop where there was open space and let the fire pass by was not regarded by every one.

115. On this occasion it must be admitted that the Forest establishment behaved thoroughly well and so did the Police stationed at Punassa. The case was one of exceptional danger, and had it not been for the presence of mind and calm and deliberate action of Forest Ranger Mahadeo Rao, must have ended in a much more serious disaster.

Other works of improvement.

116. In the Khanda reserve, in consequence of the failures of the previous year it was resolved to confine planting to a smaller area and to have large pits prepared to receive the plants. Accordingly 38,000 pits were dug arranged 8 feet apart in lines 15 feet apart, the pits being 3' × 2' × 2' or 24 feet cube. Rain fell early, viz. in the latter part of May, but soon stopped; there was no more till 3rd July, when the planting out of bambu and teak was commenced. The teak seedlings of the year were not then sufficiently advanced, and those of the previous year which had been too much forced by the early rain in May were used. At the end of 10 days when 20 acres had been planted, equal to 5,808 plants put out, the rain-fall became so uncertain as to necessitate the work being stopped. From 9th July to the close of that month there were only six days on which rain fell in such quantity as to be of any use to transplants, in August there were only three such days, and in September but one. As might be expected under such conditions, without artificial watering, the necessity of which was never contemplated, the result was not satisfactory, though what proportion of plants put out will survive cannot be determined till the close of the current rains. It has been sufficiently discouraging to stop the preparation of more land and to restrict operations to the planting of those pits already dug and perhaps a subsequent extension of 4 or 5 acres per annum adopting different methods until success can be guaranteed.

117. A small experiment in the planting of evergreen belts was made by Mr. Whittall, the object of such belts being partly the influence they exercise on the surrounding vegetation, but chiefly the facilities that they afford for fire protection: various species were used. A few of the plants died off in the hot months after close of the year, but the precise number of each species now thriving has not yet been ascertained.

118. At Kirgaon there are 625 orange trees of the best variety, raised with the object of making the nursery and forest garden self-supporting. A few of these had already begun to fruit, so that in two years they must yield a net income of Rs. 1,000 per annum at the least.

119. In the Khandwa reserve the charges under A VIII*d* have been much higher than they should have been. This was due to negligence or indifference on the part of the Ranger in charge, which has resulted in his transfer to a less important and less favoured post.

Works of general utility.

120. As works of utility, may be noted the lining with masonry of the well at Kirgaon at a cost of Rs. 665: the amount is high for 2,400 cubic feet of masonry, but isolated, small works especially of this kind are always more expensive than large works.

A small pucka rest-house at Kirgaon in the same reserve was also almost completed, the flooring, white-washing and painting of wood work remaining to be done. The outlay on this work up to the close of the year amounted to Rs 826. On the repairs and maintenance of buildings including forest Chowkies, there was an outlay of Rs. 848, of which Rs. 202 were spent in putting in order a small pucka building near Atar conveniently situated as a rest-house, and which was made over to the department free of charge.

Yield and working.

121. The re-opening of the question of fuel *versus* coal for the working of the Holkar Scindia and Neemuch State Railway has stopped the demand for fuel from the Khandwa and Punassa reserves.

122. During the year under report the Punassa reserve was closed against the cutting of green wood. Bambus, dry wood, grass and minor produce only were extracted. In Chandgarh, Khandwa and Kalibhit there was no change in the arrangements for disposal of produce. But a small quantity of building wood was extracted, and that was obtained chiefly from Kalibhit.

123. The yield of the forest produce is given below:—

Forest.	Timber.							Fuel.			Bambus.	Grass.	
	Teak.			Other wood.									
	Poles, pieces, &c.			Poles, pieces, &c.									
	Number.	Cart loads.	Joti loads.	Number.	Cart loads.	Joti loads.	Head loads.	Cubic feet.	Cart loads.	Head loads.	Number.	Cart loads.	Head loads.
Kalibhit ...	294	170	188	958	195	886	1,112	...	1,308	...	174,447	80	200
Punassa ...	2	...	...	..	58	..	...	22,814	479	60	177,167	400	774
Chandgarh ...	424	...	...	27	160	5	27	...	276	...	190,156	13	...
Khandwa ...	...	...	...	27	25	...	38	500	1,866	107	...	852	12
Total ...	720	170	188	1,012	438	891	1,177	23,314	3,929	167	550,770	2 345	986

Of the fuel 22,814 cubic feet resulted from cuttings in previous years, the remainder was dead wood picked up in the forests.

124. The number of cattle grazed was as follows :—

Buffaloes ...	...	No.	8,681
Cows and bullocks ...	...	"	22,487
Sheep and goats ...	...	"	1,070

Financial results.

125. The following Statement gives the receipts and charges against the different reserves.

Range.	Receipts.	Expenditure.			Surplus.	Deficit.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kalibbit ...	8,929	2,520	2,035	4,555	4,374	...
Punassa ...	5,200	5,826	2,048	7,874	...	2,674
Chandgarh ...	3,435	1,432	957	2,389	1,046	...
Khandwa ...	3,878	10,192	2,516	12,708	...	8,830
Total ...	21,444	19,970	7,556	27,526	...	6,084

It will be observed that notwithstanding the cessation of the demand for fuel for the Holkar Scindia and Neemuch State Railways and the smaller

demand for grass, which owing to a short rain-fall was abnormally large in 1880-81 and materially raised the income of Punassa and the Khandwa reserve in that year, the total receipts were only Rs. 2,540 less than in the previous year. The difference already referred to in the realizations from grass amounted to Rs. 1,900, that on account of fuel supplied to the Holkar Scindia and Neemuch State Railway Rs. 2,000. Leaving these items out of account the receipts for 1881-82 were more than in the previous year by Rs. 1,800.

126. If the demand for Railway fuel had continued it would doubtless have been a good thing for the Division. Its sudden cessation changed what should have been a source of profit to a source of loss. Other means of developing the revenue will however soon be found. Too much in this respect must not however be expected, for though with the sure certainty of time these forests will have to meet a heavy demand, there are at present large sources of supply elsewhere both in Government and private forests.

CHANDA DIVISION.

Area and boundaries.

Area.

127. There has been no change in the area of the 1st class reserves. On 14th March 1881 a notification was published under Section 4 of Act VII. of 1878 regarding the Janona lands with an area of 114½ acres situated in the Moharli forest, purchased with the intent of including them in that reserve; but as the time for appeal against the Forest Settlement Officer's decision had not elapsed, this area continued as unreserved forest to the close of the year.

Boundaries.

128. The boundaries of the Bimarum and Mirkullu reserves are in excellent order. The boundary of the Moharli forest (length 131 miles) with the exception of a short length in the south-west corner, of which 9 miles only are artificial, was examined personally by the Divisional Officer, who found that in two places only, viz on the Pooljhiri nala and where the Moharli malguzari adjoins was the demarcation indistinct; these defects will ere this have been corrected. 38 miles of boundary were cleared at a cost of Rs. 82-4-7 of shoots, bambus, &c., that had sprung up, while in the course of fire protection 88 miles were cleared even of grass and leaves.

Protection and improvement.

Establishment.

129. Hitherto the establishment on the Ahiri reserves has consisted of 1 Forester and 4 Forest guards. The death of the Forester necessitated his being provisionally replaced by two Jamadars of the temporary establishment. Protection was complete and there were no forest offences.

130. In the Moharli Sub-division the regular establishment consisted of one Forest Ranger, 4 Foresters and 10 Forest guards, which for protective purposes was to a considerable extent strengthened by the revenue establishment of 10 Moharirs and 30 Chaprasis stationed at outlets from the forest. In this range 33 forest offences were reported. In one case 7 offenders were prosecuted and punished. In the remaining 32 cases 191 persons concerned were permitted to compound. The number of offences reported is surprisingly small, which doubtless is in a measure due to the extremely easy terms on which forest produce is procurable combined with efficiency of the protective establishment.

131. There has been no increase in the area under protection from fire since 1876-77. The following is a statement of the work under this head and its cost:—

Protection from fire.

Forest.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. a. p.	Rs. a. p.	Pies.
Bimarum ...	12,296	12,296	840 9 9	43 12 0	13·126
Mirkullu ...	8,479	8,479	801 10 8	60 8 1	18·153
Taroba ...	25,619	25,509	1,188 4 0	29 13 0	8·944
Govurdhun ..	13,931	13,931	669 13 5	30 12 4	9·232
Total ...	60,325	60,215	3,500 5 10		
Average for the Division ...				37 2 3	11·138

The fire that occurred in the Taroba block was quickly extinguished. It was assisted by several of the inhabitants of an adjoining village that they had seen lightning strike where the fire broke out, but no other evidence as to the origin of the fire could be obtained.

132. Regarding the effects of fire protection there is nothing new to record. In the Ahiri forest it is rendering the systematic removal of the mature trees more and more desirable.

133. In the Bimarum forest 355 large trees were marked and removed to give place to young teak; and in the Moharli forest near Moharli itself a few young teak were planted out, but with these exceptions nothing more than protection was attempted for the improvement of the forests.

Other works of improvement.

134. Though the plantings of teak at Singora and Govurdhun in Moharli were reported in previous years as unsatisfactory, the experimental plantings in broad cleared bands near Moharli itself promise well, notwithstanding that some of the trees were injured by an officious subordinate attempting to prune them. Some idea of what teak will do when artificially raised in this locality may be formed from the following measurements of ten trees planted in the rains of 1871 in pits 2 feet cube arranged in groups of five and filled with soil enriched with manure and wood ashes. The 3 largest trees measure respectively 13, 14, and 15 inches in girth, the thickest being 36 feet in height. Two isolated trees left in the nursery of February 1877 where they had the advantage of being watered have attained the girth of 23 and 24 inches respectively, the thickest being 36 feet in height, though they are not in the same beautiful form as those last referred to.

Yield and working.

135. For protective purposes the Moharli forest is divided into 4 sub-ranges, but in respect of the working of the forest the divisions are as follows :—

1st.—The forest east of the Andhari area of 171 square miles.

2nd.—The forests west of the Andhari, not under protection from fire, area 126 square miles.

3rd.—The forests west of the Andhari under protection from fire, area 62 square miles.

In the 1st area all tree vegetation is strictly protected, in other respects the forests are open to purchasers for the removal of produce and also for grazing. In the 2nd area certain of the more important trees being strictly protected, the whole forest area is open for the cutting and removal of wood, bambu and grass, as well as grazing and the collection and removal of minor produce and dead wood. In the area under fire protection grazing has been allowed during the rains on the outskirts of the Taroba block for cattle of the adjoining villages, but in other respects the forest has been closed entirely. It is now proposed to open them for bambus, dry wood and grass during the portion of the year in which there is no risk of fire.

In the Mirkullu reserve no produce was cut, while in the Bimarum forest, with the exception of inferior species felled for improvement as indicated in paragraph 133, six teak trees only were felled.

136. Subject to the limitation given in the preceding paragraph purchasers have been allowed to cut and remove from the Moharli forest what they wished, paying for the material taken as it left the forest.

For the check of the produce thus removed, there were 10 nakas maintained during the working season. The collections at these nakas, amounting for the year 1881-82 to Rs. 22,886, were remitted daily to the treasury.

137. The yield of the forests was as follows:—

Forest.	Timber.					Firewood.			Bambus.		Grass.	
							Charcoal.					
	Teak, cubic feet.	Saj, cubic feet.	Other wood, cubic feet.	Wood for house building, agricultural implements, manufacture of carts, &c.	Boats.	Cart loads.	Bandy loads.	Head loads.	Number.	Rambu mats and baskets, &c.	Cart loads.	Head loads.
Ahiri ...	...	...	...	...	..	...	...	...	...	...	...	...
Moharli ...	...	...	6,404	115,165	9	1,404	16	2,188	1,018,436	533,163	6,658	909

The demand on Moharli for building wood, bambus and grass is steadily increasing.

138. The number of cattle grazed is small, the totals being :—

Buffaloes	...	...	No. 463
Cows and bullocks	...	...	„ 6,714
Sheep and goats	...	...	„ 1,563

Collection of produce for sale at depot.

139. In the Moharli forest such undertakings have been limited: a small quantity of building wood and bambus was cut and transported to the Warora Depot, 24 miles distant from the forest, at a cost of Rs. 1,803-10-9. The value of the sales was Rs. 2,858-14-8, while there remained at close of the year a balance worth about Rs. 800. Experimentally 3,000 poles were cut and collected in the forest in the rains of 1881 at a cost of Rs. 12, and sold before close of the year for Rs. 150, giving a much higher profit than the same produce would have

commanded while standing. Of minor produce a small quantity was collected: the transactions were as follows :—

			Balance from 1880-81.	Collected 1881-82.	Sold.
Hurra	...	Sers	6,300	2,810	8,087
Lac	...	"	54	537	9
Horns	...	No.	1,086	444	1,353

The expenditure on collection was Rs. 125-9-2 and the value of sales Rs. 529-5-4, the selling rates varying from 2 to 5 times the cost of collection.

140. In the Ahiri Sub-division 7,617 cubic feet of teak and 113,406 cubic feet of saj was brought to depot at the Ahiri Saw mills. Of the above quantity 62,677 cubic feet were collected by hired carts at a cost of Rs. 4,566 or annas $1\frac{1}{8}$ per cubic foot and 58,346 cubic feet by Government carriage at a cost of Rs. 2,703 or annas $\frac{3}{4}$ per cubic foot. The amount above debited against work by Government agency includes all charges that would not have been necessary had the work been done by contract except the value of losses and deterioration in livestock, which have not been accurately worked out, but which would be something under pie 2 per cubic foot.

Working of the Saw machinery.

141. The Allapilli Saw mills only worked for a part of the year, in all 119 days. 70,583 cubic feet were put to the mills and gave an outturn in sawn material of 40,457 cubic feet and consequent wastage in conversion of 30,126 cubic feet.

The prescribed return of the working of the machinery has been submitted by the Divisional Officer, but as there is some error in the debits on account of wear and tear of stock that cannot be corrected without reference, it is not entered here. Without capital charges the rate for conversion fell at Rs. 8-11-0 per 100 cubic feet, or a little higher than in the previous year, the reason being that work was on a smaller scale.

Carting to river.

142. In transit to sale depots 124,502 cubic feet were conveyed by land from Allapilli to Dunarghat, nearly 60 miles, at a cost of Rs. 26,703, or a little under 3 annas per ton of 50 c. ft. per mile. In the previous year's reports I adverted to difficulties that had run up the cost of transport, and it was then stated that these difficulties had been overcome: the correctness of this statement is proved by the result of the past season's work.

Floating up the Weingunga river.

143. 146,650 cubic feet of timber were landed at Tiddighat from Dunarghat and other places along the river, at a cost of Rs. 29,357. The distance from Dunarghat up-stream to Tiddi is 108 miles, but all the timber was not moved this distance, and the actual work done was only equivalent to transporting 302,070 tons of timber for a distance of 1 mile. The cost therefore fell at the rate of annas $1\frac{1}{2}$ per ton of 50 cubic feet per mile; which, considering that the rafting is against the stream, and most of the wood of a heavy description requiring buoyage, is far from being high.

144. A sum of Rs. 23,000 was spent in distributing 70,569 sleepers along the Chhattisgarh line, but the distances and number delivered in one place were too varied to admit of the carriage rate being given. With previous charges for part conveyance in the previous year the cost of distribution cannot have been less than Rs. 0-8-0 per sleeper.

145. The sales of timber cut and collected on account of Government amounted in round figures to 210,000 c. ft.

Financial results.

146. The receipts and charges of the year were as follows:—

Range.	Receipts.	Expenditure.			Surplus.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Ahiri	2,67,027	1,09,026	7,013	1,16,039	1,50,988
Moharli	26,439	9,232	1,472	10,704	15,735
Total ...	2,93,466	1,18,258	8,485	1,26,743	1,66,723

147. The steady increase in the Moharli income is very satisfactory. But ten years ago when there were scarcely any protective restrictions the income from this forest was trifling. In 1875-76, the first year of its present organization, the income was Rs. 12,219, while the charges amounted to Rs. 11,612, so that in 5 years the receipts have more than doubled, while the surplus has increased from Rs. 607 to Rs. 15,735.

148. The Ahiri Sub-division shows a large surplus, but if the deficit of the four preceding years be deducted, it is reduced to Rs. 6,459. This is a very small profit, more especially when divided over five years, but the Government forests have been worked solely with a view to their improvement by removing trees of inferior species, and, with the exception of a little dead wood, whatever teak has been brought to market was purchased from private forests for the purpose of floating over inferior woods, and paid for. The department regarded its claim against the Nagpur and Chhattisgarh State Railway was good, for Rs. 45,700 more than have been received, but it has been otherwise ruled by the Chief Commissioner. The actual receipts do not give the full return that will result from the outlay of the past five years, from which more revenue will yet be obtained, and as yet the chief point gained is that the practicability of bringing the heavy and less valuable woods of the Ahiri forests into market at moderate rates has been fairly proved; it attaches a value to produce hitherto regarded as valueless, and renders the working of the forests less difficult. The importance of this point gained will be realized if reference is made to the inspection report drafted by the Inspector General of Forests while on tour in the Central Provinces in 1877-78.

SEONI DIVISION.

Area and boundaries.

149. The area of the Satpura reserve is unchanged, and no other 1st class reserves have been formed.

Area.

150. The Satpura reserve, with a boundary 324 miles in length, is defined by masonry pillars and a cleared line 40 feet wide. A few more masonry pillars are, it is reported, desirable. The Divisional Officer has not yet been able to specify the length of boundary cleared

Boundaries.

during the year, the outlay on which account was under Rs. 50. The demarcation of this reserve must however be regarded as complete.

Protection and improvement.

151. For this purpose combined with other duties, the following establishment was available :—

Establishment.

Grade.	Korai.	West Pench.	East Pench.	Sonawani.	Total.
Permanent Forest Ranger	...	...	...	1	1
„ Foresters	2	2	1	1	6
„ Forest Guards	7	6	4	4	21
Temporary Duffadars	...	1	2	...	3
„ Watchers	4	3	7	8	22

Protection has been fairly complete.

152. The number of offences reported was 34, in which 50 persons were involved. In 4 cases 18 persons were prosecuted, of whom two were acquitted. In 29 other cases 32 offenders were allowed to compound.

Breach of forest rules.

153. The following Statement shows what was accomplished under this head and its cost :—

Fire protection.

Forest.	Area in acres.		Cost of area actually protected.						
	Under protection.	Actually protected.	Total.			Per square mile.			Per Acre.
			Rs.	a.	p.	Rs.	a.	p.	Pies.
Korai	31,210	31,210	494	9	2	10	2	3	3·043
East Pench	42,580	42,580	607	4	11	9	2	0	2·738
Nagulwari	9,680	9,680	101	13	1	6	11	8	2·020
Paraspani	8,240	8,240	86	5	4	6	11	3	2·012
Sakata	10,020	10,020	156	3	10	9	15	8	2·994
Narhur	39,040	37,040	410	12	10	7	1	6	2·129
Total ...	140,770	138,770	1,857	1	2				
Average for the Division ...						8	9	0	2·569

It will be observed that there has been no extension of the area under protection, that a fire occurred in the Narhur block burning 5 per cent of that block which was first taken in hand in 1881, while in the remaining areas protection was complete.

154. In certain cases to meet special wants, a few head of cattle have been allowed to graze in certain portions of the protected areas, otherwise the areas under protection from fire have been closed against grazing.

Grazing.

155. Very marked is the improvement that is taking place in the condition of the forest in a large portion of the Korai block In Nagulwari also the forest is unquestionably benefitting from protection. The other areas under fire protection were not visited by the Conservator.

156. Beyond fire protection and the preservation of the growing material little or nothing was undertaken during the past year to improve the condition of the forest growth. A few badly grown teak were cut back in the Korai range, and in the Nagulwari valley in the West Pench Range a few teak and sissu were planted out in blanks.

Other works of improvement.

Yield and working.

157. The following Statement exhibits the yield of the forests in all important products :—

Forest.	Building wood.			Fuel.		Bambus.			Grass.		
	No of poles.	Cart loads.	Head loads.	Cart loads.	Head loads.	Number.	Cart loads.	Head loads.	Pulas.	Cart loads.	Headloads.
Korai ..				804	95	403,987	29		...	2,140	
Sonawani ...	810	431	2,464	11,183	14,118	363,032	1,516	3,677		5,019	98
West Pench	1,116	66	3	425	150	137,045			203,335	175	28
East Pench	6,020			590	8	151,209				1,890	147
Total	7,946	497	2,467	13,002	14,371	1,055,273	1,545	3,677	203,335	9,224	273

It will be observed that very little timber has been felled, though the outturn is somewhat above that of the previous year. The felling of green material has been mainly confined to bambu. The outturn of fuel has increased, while that of bambus and grass is about double the yield of the previous year.

158. The forests also furnished grazing for cattle as follows :—

Cows and bullocks	...	No. 27,873
Buffaloes	...	„ 4,006
Sheep and goats	...	„ 1,298

Besides which, grazing licenses were taken out for 36,951 head of cattle for short periods. The number of cattle for which annual licenses were taken out was much smaller than in the previous year, but this is probably accounted for by the large increase in the number of cattle for which grazing licenses for short periods were issued.

Financial results.

159. The following statement exhibits the receipts and charges of the four ranges which form the Satpura Reserve :—

Range.	Receipts.	Expenditure.			Surplus.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Korai	7,642	3,211	1,251	4,452	3,190
Sonawani	6,775	1,850	893	2,743	4,032
West Pench	6,078	1,981	925	2,906	3,172
East Pench	6,247	2,281	1,267	3,548	2,699
Total ...	26,742	9,323	4,326	13,649	13,093

The total income, it is admitted, is not a large one, but it is derived from forests covering the ghats between the Nagpur open country and the tablelands of Seoni and Chhindwara, and comprising the least accessible parts of Nagpur and some of the least accessible portions of Seoni, Chhindwara and Balaghat, and when it is remembered that, but 10 years ago, *i. e.* in 1871-72, notwithstanding that less regard was then paid to the conservation of the forests, the receipts only amounted to Rs. 6,611, while the charges amounted to Rs. 13,671, it must be admitted that the financial results of the past year are satisfactory. Doubtless another 10 years will show equally great improvement, but improvement in this respect if it is to be stable can only gradually take place, and moreover fluctuations between the income for different years must always be expected.

SAUGOR DIVISION.

Area and boundaries.

160. The area of the 1st class reserves is the same as the close of the previous year.

Area.

The result of the Conservator's inspection points to the expediency of the Jalundhar forest being marked off permanently for the production of wood and bambu, and proposals on this subject will shortly be submitted. Though at present covered with an inferior forest growth it has in it the making of a good reserve, in which in parts bambu in other places teak, and with protection against deer, sandalwood will form the most important species.

161. The length of the boundaries is 198 miles. At the close of the year the Conservator found portions of the boundary lines encumbered with bushes and shoots. The Divisional Officer has since reported the correction of this defect and that the boundary lines are in perfect order. There are 128 masonry and 2,387 other boundary marks. 42 of the former and 11 of the latter are reported as in want of repair or renewal.

Boundaries.

Protection and improvement.

162. For protection combined with other duties, the following establishment was retained :—

Establishment.

Class.	Garhakota.	Tigora.	Ranipura.	Ranjir.	Hathkho.	Total.
Forester ...	1	...	1	...	1	3
Duffadars Temporary ...	...	1	...	1	1	3
Forest Guards ..	3	...	4	4	7	18

The establishment is strong for the area of the forest, but considering the situation of the latter, it is only just sufficient.

163. As an agency for the prevention of offences the establishment has worked fairly well, though as compared with other first class reserves the number of acts constituting offences under the Forest law has been large, a fact probably due to the reserves being smaller, and consequently having area for area a greater length of boundary, and also to some of them being near large towns. There were in all 184 cases of breach of forest rules in which 336 persons were involved. There was only one prosecution, and in this case the accused was discharged ; two cases were pending at the close of the year, while in the remaining 181 cases the offenders were allowed to compound.

Forest offences.

164. The following Statement shows the area under protection and its cost :—

Protection from fire.

Range.	Area in acres.		Cost of area actually protected.		
	Under protection.	Actually protected.	Total.	Per square mile.	Per acre.
			Rs. a. p	Rs. a. p.	Pies.
Garhakota ...	2,899	2,894	20 5 0	4 7 11	1·349
Hathkho ...	10,598	10,598	370 0 6	21 1 5	6·327
Rangir ...	1,987	1,987	56 5 2	18 2 2	5·442
Ranipura ...	2,720	2,720	38 0 0	8 15 0	2·652
Total ...	18,204	18,199	484 10 8		
Average for the Division. ..				16 12 1	5·027

The Tigora reserve not included in the above statement has remained safe from fire, and so also, there is reason to believe, have the remaining portions of the

other reserves. In the areas under protection from fire no grazing has been allowed.

165. In the Ranipura forest it will be some time before any marked improvement can take place even from fire protection or the exclusion of cattle. Elsewhere decided improvement in the condition of the forests is apparent.

Other works of improvement.

166. The planting of bambu commenced in 1879-80 was continued in Garhakota and Hathkho, and a small number of plants were put out in Rangir. The cost of the plantings and the result as at present known is given below:—

Forest.	Year of planting.	No. of plants put out.	No. reported alive.	Total cost.
				Rs. a. p.
Garhakota ...	1879-80	6,700	22,000	484 13 10
	1880-81	21,047		1,528 6 9
	1881-82	44,816	16,610	1,176 6 2
Hathkho ...	1879-80	3,315	about 14,000	115 15 0
	1880-81	16,035		490 12 10
	1881-82	22,140	about 11,000	264 10 11
Rangir ...	1881-82	7,012	Not known.	57 3 1

The plants were arranged 15 feet apart within fixed areas wherever the soil was considered suitable.

167. The plantings of the 1881-82 have not proved as satisfactory as those of the preceding year, which is mainly due to some of the plants when put out being deficient in strength, still they promise to give a very good return for the outlay incurred. The previous year's plantings have done best in Garhakota. A sum of Rs. 71-3-6 was spent on the 50 acre field sown with bambu in 1880-81. Half of the area last referred to was at the close of 1880-81 regarded as unsuccessful, but sufficient plants survived to be worth caring for, while the remaining 25 acres, besides being stocked, should furnish a considerable supply of plants for future plantings. There was also a small outlay on the up-keep of nurseries in Garhakota.

168. It is worthy of note that the small batch of bambu (D. Strictus) planted in 1873 in Garhakota yielded their first outturn of good bambus in the dry season of 1881-82. Eight years may therefore be taken as the time in which artificially raised bambu of this species will under ordinary circumstances commence to give a return.

Yield and working.

169. The collection and removal on payment of dead wood and minor produce has everywhere been permitted. In Tigora the cutting in rotation of the inferior undergrowth for conversion into charcoal is allowed, while in Ranjir within limited areas badly grown trees were cut to meet the wants of adjoining villages. In the Chitoli block of Ranipura some saj that had sufferred in previous years from frost was cut out, and from each of the reserves a few bambus were cut and removed.

170. The following Statement gives the yield of the forests :—

Forest.	Teak.		Other wood for building and agricultural purposes.			Fuel.				Charcoal.	Bamboos.	Grass.	
	Logs.	Poles.	No. of Poles.	Cart-loads.	Head load.	Cart loads.	Buffaloe, bullock and donkey loads.	Basket loads.	Head loads.	Head loads.	Number.	Cart loads.	Head loads.
Garhakota	29	5,033	4			312	952	1,383	1,911	123	768	19	1,016
Tigora ..	.	391	301		17				340	2,216	821		8
Ranipura .			1,595			33	1,696		1,032		925	56	3
Rangir ..			1,158			638	7		93	1	451	64	170
Hathkho		7,207	7	88		625	21	..	83	5	1,230	164	613
Total	29	12,681	3,065	88	17	1,608	2,676	1,383	3,459	2,409	4,204	303	1,810

The forests furnished grazing for the following stock :—

Buffaloes	...	No. 2,260
Cows and bullocks	...	„ 9,563
Ponies and donkeys	...	„ 21
Sheep and goats	...	„ 244

Financial results.

171. The following Statement gives the receipts and charges for the different reserves :—

Range.	Receipts.	Expenditure.			Surplus.	Deficit.
		Executive, protective and other charges wholly debitable to particular forest.	Control and other charges not wholly debitable to any particular forest.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Garhakota ..	2,759	2,381	555	2,936	...	177
Tigora ...	405	126	71	197	208	...
Ranipura ..	1,185	858	79	937	248	...
Rangir ...	1,560	488	332	820	740	...
Hathkho ...	2,518	1,727	534	2,261	257	...
Total ...	8,427	5,580	1,571	7,151	1,276	...

It will be observed that from Garhakota and Tigora, the areas which were the first reserved, the revenue now amounts to nearly Ro. 1 per acre. Regarding the other reserves it can only be said that the income is in each case a little higher than in the previous year. Of the expenditure it may be noted that of the amount against Garhakota at least Rs 1,200, plus part of the control and other establishment charges, are strictly debitable to future years; while in Ranipura, Hathkho and Rangir the outlay is mainly debitable to improving by protection the condition of the forests with a view of bringing them to a workable condition.

The area, revenue and expenditure, which collectively regulate the extent to which any particular forest takes up the time of the Divisional Officer, have been taken into consideration in apportioning the control charges.

CHAPTER III.

SECOND CLASS RESERVES.

NAGPUR DIVISION.

Area and boundaries.

172. The area of the 2nd class reserves is, as at the close of the previous year, 390 square miles. In paragraph 137 of the report for 1880-81, it was stated that the clearing of 10 feet lines between the 2nd class reserves and private estates had been nearly completed by the private proprietors themselves. The Assistant Conservator now reports that the demarcation is defective, and that in some places the lines are incorrectly laid out. For the checking of these boundaries and correction of any errors that may exist the Deputy Commissioner is now arranging, and more substantial marks than those put down at the time of settlement will be erected.

Protection.

173. Only 82 offences against forest law were reported. In 6 cases the offenders were not detected, while in 70 cases the offences were compounded. In 6 cases 19 persons were prosecuted, with the result that one person only was acquitted.

General management.

174. The arrangements for working the forests and for collecting the revenue have undergone no change. The former have proved so far satisfactory, that over a considerable portion of the area there is a decided improvement in the forest growth.

Yield.

175. The right to remove grass from "birs" within the reserves, as also to collect and remove minor produce was leased, and there is no record of the quantity of produce removed under these leases.

Of the 16 superior species, cutting of which is prohibited, except under special license, the outturn during the year was small, amounting only to 5,350 poles under 1 foot in girth, 25 poles under 2 feet in girth, and 662 cart loads. Of other produce the yield was as follows :—

		Cart loads.	Head loads.
Timber	...	495	522
Fuel	...	13,127	24,572
Bambus	...	60	5,039
Grass	...	1,632	2,817

The outturn of timber and grass has been a little more, that of fuel and bambus a little less, than in the previous year, but the difference is not such as to require explanation.

176. As compared with the previous year the number of cattle grazed was greater as will be seen from the following statement:—

		1880-81.	1881-82.
Buffaloes	...	6,096	5,106
Cows and bullocks	...	69,737	70,620
Goats and sheep	...	17,641	22,230

177. Including the pay and allowance of the Divisional Officer, an item varying with the grade to which the officer belongs, the receipts and charges for the past two years were as follows :—

Receipts and charges.

Year.	Receipts.	Charges.			Surplus.
		Executive, protective and A.charges.	Control charges.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1880-81 ...	26,324	8,159	5,184	13,343	12,981
1881-82 ...	28,712	8,460	6,593	15,053	13,659

The receipts show a fair increase. The control charges have been higher, but the surplus is still larger than in the preceding year.

BHANDARA DIVISION.

178. The area is the same as at close of the preceding year. Regarding the boundaries it may be noted that the necessity of having the demarcation on the ground checked and improved has been recognized and that arrangements are being made to commence operations in the next open season.

Area and boundaries.

179. There have been but few forest offences. In 59 cases reported, 154 persons were detected in forest offences. In 51 cases 108 persons were prosecuted under the Forest Act, and two persons only were acquitted. In the remaining 8 cases the 46 offenders compounded.

Protection.

180. The three small blocks of Koknagarh, Gungejhari and Kondaburra have remained closed, and it is reported that the young teak and saj in them is coming on well.

181. In the arrangements under which the forests were worked there has been no change. From the Deputy Commissioner's report I understand that the people are now quite reconciled to the arrangements under which they may supply themselves from the Government forests, which arrangements came into force in 1879-80. At the same time he notes that in the open country the people complain of some of the rates, especially those for bambus and fuel. Such complaints must, however, always be expected, and I am not disposed to believe that any reduction in rates would prevent them ; and certainly Rs. 0-4-0 per cart load of fuel and Rs. 2-0-0 per cart load of bambus cannot be regarded as high in forests so accessible to the people as are those of Bhandara. The railway too has doubtless caused a rise in the value of produce generally in a great portion of the district, and with the value of other articles that of forest produce must, as a rule, rise also.

182. The following is a comparative statement of the receipts and charges for the past two years :—

Receipts and charges.

	1880-81.	1881-82.
	Rs.	Rs.
Receipts	44,618	44,860
Charges	8,229	12,780
Surplus ...	36,389	32,080

The foregoing statement however does not give a correct idea of the value of the year's transaction, as part of the payments under head IV*b* was deferred till May, and moreover a sum of Rs. 320 remained to be recovered on account

of the sale of bambus. The real value of the year's transaction was Rs. 3,800 more than in 1880-81. There has been an increase in the income from timber, fuel, bambus, grazing and fodder grass, as also under drift and waif wood and fines and forfeitures. The large increase of nearly Rs. 1,000 under the latter head is due to compensation being received for the unauthorized occupation of forest land by malguzars. For bambus there has doubtless been a brisk demand. The revenue from fuel amounted to Rs. 13,457, an important item, but not a very large sum when it is considered that it represents the value of nearly, if not quite 20,000 tons of wood. The rise in the income from grass is attributed by the Deputy Commissioner to cartmen removing grass, being allowed to remove without payment a couple of wooden axles. The charges have been higher owing to Mr. Ludlow, Assistant Conservator, being for a time attached to the Bhandara district to which his pay and allowances were debited.

183. On the whole, the result of the change from commutation to the present arrangements, under which, except as regards the villages bordering the forest, payment is required according to the quantities of produce removed, has proved financially successful, and it must certainly have tended to check waste.

184. The Deputy Commissioner is of opinion that if the rates for bambus were reduced the revenue would be largely increased. This is doubtless correct, but the increase would not be lasting, for the bambu producing area in Bhandara is not extensive, and moreover with a railway running close to the principal bambu producing tract, such a reduction would upset the revenue arrangements of other districts.

WARDHA DIVISION.

Area and boundaries.

185. The area held as 2nd class reserves was the same as in the preceding year. The boundaries of the two forest blocks of Erjarh and Dhuga were, it is believed, carefully kept up; there was an outlay thereon of Rs. 123. Regarding the boundaries of the other areas there is nothing to record.

Protection.

186. An establishment of 1 Forest ranger, 2 Foresters, 6 Forest guards, 4 Daffedars and 49 peons has been employed in the watch and ward of the forests. This establishment was worked by the Assistant Conservator subordinate to the Deputy Commissioner. How far it has been successful as a protective agency it is difficult from the District report to determine.

Only 12 cases of breach of forest rules are returned, the 24 persons concerned in which were prosecuted with the result that in 10 cases the conviction of 14 persons was obtained.

Fire protection.

187. In the past year the two blocks of Erjarh and Dhuga continued under fire protection, but only 23,943 acres were actually protected. The cost it is true was little, amounting only to Rs. 478-1-10; still the result is not satisfactory. The remarks of the District officer imply that if the Forest officer had been more discrete he would have been more successful.

188. With the view of increasing the stock of bambu there was an outlay of Rs. 491 on the maintenance of bambu nurseries and the preparation of land for putting out the plants when ready. This, however, is but a small undertaking.

Collection of produce on account of Government.

189. The efforts to enhance the value of grass and fuel in the forests, and, at the same time, to meet the wants of the station of Wardha by bringing these products to depot on account of Government have been continued, and in order to draw hired carriage to the

work of transport a few Government carts and bullocks have been kept up. The result from 1st April 1881 up to date has been a profit of Rs. 2,274, exclusive of the value of carts and cattle, on a total outlay of Rs. 7,121 including Rs. 1,200 on account of the price of carts and cattle.

Receipts and charges.

190. The receipts and charges for the past two years have been as follows :—

Year.	Receipts.	Charges.			Surplus.
		Executive, protective and A. charges.	Control charges.	Total.	
1880-81	28,335	9,049	5,320	14,369	13,966
1881-82	28,885	10,850	5,556	16,406	12,479

Less teak was extracted than in the preceding year, and the sales from depot were not quite so large as in 1880-81 In other respects the income has been higher.

CHANDA DIVISION.

Area.

191. The area remains unchanged.

Boundaries.

192. During the past year a little was done in checking the boundaries of these forests where they adjoin private estates, and arrangements have been made to push on the work in the current year. It is expected that in this district the number of cases in which the demarcation is inaccurate are comparatively few. Moreover, owing to the country being generally flat or only undulating the same difficulties are not likely to be experienced from Settlement maps disagreeing with those of the professional survey.

Establishment.

193. Omitting the 4 moharirs and 1 peon employed in office work, the establishment at the disposal of the Divisional Officer has been as follows:—

Permanent.			Temporary.					
			Inspection and Patrol.			Tehsil and revenue Nakas.		
Forest Ranger.	Foresters.	Forest guards.	Naib Darogahs.	Inspecting Daffedars.	Chaprasis.	Naka Moharirs.	Tehsil Moharirs.	Chaprasis.
1	2	8	2	10	13	73	4	14

This establishment, at least that portion of it which has the patrolling of the forests, is weak for the work required of it.

Forest offences.

194. During the year 1,875 cases of breach of forest rules were reported, of which 1,012 were for grazing contrary to rule, and 863 cases were connected with the removal of produce from the forests. Considering the very large number of cattle grazed and the enormous quantity of produce removed, it may not be surprising that there should be 1,800 cases of people availing themselves of the use of the forests otherwise than in strict accordance with rule; still it is probable that under the system in force all the cases did not really constitute forest offence, and, as a matter of fact, in 64 cases only was prosecution considered necessary. while in 1,171 cases the produce removed or grazing was paid for at the usual or higher rates.

Protection of growing stock.

195. The felling of teak, saj, beeja, bhiri, sheshum, mhowa, chironji and hurra is not allowed except with the special permission of the Deputy Commissioner; in other respects the extraction of produce is only controlled by requiring payment for what is removed.

196. There has been some change in the arrangements for the disposal of minor produce whereby greater competition for the right to collect will, it is expected, be secured. In other respects the revenue arrangements as well as the rates have remained unaltered.

Commutation.

197. In that portion of the district east of the Weinganga the commutation rate is annas 4 per house and covers building wood as well as fuel and grass, in that portion west of the same river the rate is annas 2 per house and covers grass and fuel only; while in the Sironcha sub-division the commutation fee which varies from annas 2 to rupees 5 per house as fixed annually by the Assistant Commissioner according to the status and requirements of the householder, covers all produce for household and agricultural purposes. Of 1,348 villages in the district 1,114 having 129,440 houses commuted. Of the commutation fees Rs. 2,465-9-4 remained to be realised at the close of the year.

198. Of the produce removed under commutation licenses which must represent the bulk of the material taken from the forests there is no record. The produce removed on licenses for fixed quantities is given below, that taken at the higher and that at the lower rate being shown separately.

Description of produce.	At higher rate of forest duty.		At lower rate of forest duty.		Total.	
	Cart loads.	Head loads.	Cart loads.	Head loads.	Cart loads.	Head loads.
Timber ...	1,247	5,524	38,201	7,682	39,448	13,206
Bambus ...	1,151	23,953	10,348	5,058	11,499	29,011
Firewood ...	68	51	13,453	144,131	13,521	144,182
Charcoal ...	...	....	81	11,463	81	11,463
Bakhal rope ...	11	2,046	...	...	11	2,046

The produce removed at the higher rate represents exports from the district.

199. The number of cattle grazed was as follows:—

Cows.	Bullocks.	Milch buffaloes.	Male buffaloes.	Sheep and goats.
180,545	72,837	22,661	9,250	122,563

Receipts and charges.

200. As compared with the previous year the receipts and charges stand as follows:—

Year.	Receipts.	Charges.			Surplus.
		Executive, protective and A.charges.	Control charges.	Total.	
1880-81 ...	71,845	11,098	5,818	16,916	54,929
1881-82 ...	84,089	12,804	6,753	19,557	64,532

The increase in the receipts is, it is believed, mainly due to better watch and guard and the more efficient checking of the commutation and grazing lists; at the same time it is probable that, as in some other districts, the demand in Chanda has been brisker in the past than in the previous year.

There has been a slight increase in the charges on account of temporary establishment, while in apportioning the Divisional control charges for the past year, a somewhat larger sum has been found debitable to these forests than was apportioned to them in 1880-81. Considering the excessively low rates charged for most of the produce removed, the relation of the income to the expenditure must be regarded as very favourable.

BALAGHAT DIVISION.

Area and boundaries.

201. There has been no change in the area of the 2nd class reserves. The boundaries generally are reported as in an unsatisfactory state, and special expenditure on demarcation has consequently been sanctioned. The Pandratola boundary is in excellent order.

202. The backward condition of that portion of the district in which most of the forests are situated and the low rates for forest produce that consequently prevail does not admit of an establishment proportionate to the forest area being employed, and consequently the work of protection falls heavily on the establishment.

Breach of forest rules.

203. 305 cases of grazing or removing produce contrary to rule were reported. In 14 cases 29 persons were prosecuted, with the result that in 13 cases 25 offenders were punished. In 291 cases 598 persons were permitted to pay double dues for produce obtained by them.

Conservation and improvement.

204. The areas referred to in paragraph 182 of the report for 1878-79 remained closed against the cutting of timber, but the removal from them of bambus, grass and minor produce was allowed. The Deputy Commissioner reports that the following areas were similarly closed during the past year:—

18 square miles at the foot of the Bhondwaghat,
8 square miles between the Nahra and Uskul River,
12 square miles between the Ahmudpur and Maldhar,
5 square miles near Khalondi.

The Pandratola reserve is believed to have been closed except for dead wood and grass.

A small number of tun trees put out in Pandratola are reported as coming on well.

Receipts and charges.

205. The receipts and charges together with those of the previous year are given below:—

		1880-81. Rs.	1881-82. Rs.
Receipts	...	31,807	36,486
Charges	...	7,676	9,017
Surplus	...	24,131	27,469

The fear expressed in paragraph 180 of the report for 1880-81 that the revenue for 1881-82 would be less has not been realized, the receipts being Rs. 4,679 more than in the preceding year. The increase is under commutation fees, grazing dues and receipts from hurra and bambu. The receipts from some of the other sources were a little less. The increase of Rs. 3,200 in commutation fees results chiefly from certain areas previously leased having reverted to Departmental management. More cattle were sent to the uplands to grazing, the hurra crop is believed to have been better than in the previous year, and the demand for bambus has been brisker.

JUBBULPORE DIVISION.

Area

206. The Lower Gour forest, with an area of 5,517 acres was transferred to the 1st class reserve. The area of the 2nd class reserves at the close of 1881-82 was therefore 210,502 acres. The Deputy Commissioner reports that in 5,340 acres of this area proprietory right has under agreement been acquired by private persons, though the area has not yet been excluded from the operation of the Forest Act.

Boundaries.

207. The condition of the boundaries is reported as unsatisfactory, but a special establishment has recently been applied for and sanctioned for the purpose of correcting this defect.

Protection.

208. For the protection of the forests and prevention of offences therein, an establishment of—

1 Forest Ranger,
1 Jemadar,
4 Duffadars,
30 Chaprasis and Forest guards,

is employed under the Deputy Commissioner. From the District report it must be inferred that as a protective agency this establishment has proved more efficient than in the previous year.

There appears to have been 139 cases of breach of Forest rules in which 754 persons were involved. In 17 cases 41 persons were prosecuted with the result that in 17 cases 28 persons were convicted. The remaining cases were compounded.

Conservation.

209. The blocks specified in paragraph 193 of the Forest Report for 1878-79 remained closed against cutting; 3 of these blocks are now included in the Lower Gour forest. It was proposed by the Commissioner and Deputy Commissioner that, in consideration of the present condition of the Government forests in this district and the other sources for the supply of forest produce at present available, nearly the whole area should be closed for a time against cutting, grazing minor produce being for the present made the chief source of revenue. This arrangement, however, was not approved of by the Chief Commissioner, and it was directed that certain areas only should be selected. To this end selection has been in progress, and it is hoped that during the coming season certain portions of the forests will be put on the footing of 1st class reserves.

Receipts and charges.

210. In the revenue arrangements no change has taken place. The following is a comparative statement of the receipts and charges for the past two years:—

	1880-81. Rs.	1881-82. Rs.
Receipts	17,059	18,786
Charges	5,450	5,103
Surplus ...	11,609	13,683

Though the receipts have risen by Rs. 1,627, there has been a falling off in the income from fuel, probably due to the Mandla forests being made more accessible by the opening of the Mandla road.

SAUGOR DIVISION.

Area.

211. The area of the 2nd class reserves is the same as in the previous year.

Boundaries.

212. From the District report it must be implied that the boundaries are fairly well defined. Some portions came under the observation of the Conservator and were found in good order. The Forest officer notes that attention is also paid to the maintenance of the old waste land marks by which the forests are divided into small blocks traceable on existing maps.

Establishment.

213. The establishment employed in the forests was as follows:—

4 Jamadars,
15 Duffadars,
105 Watchers.

As a preventive agency this establishment is believed to have worked well, though to secure complete efficiency as a preventive agency it is too weak.

Breach of forest rules.

214. The number of forest offences reported was 1,437. Of these, 50 were at once dismissed without further action, in one case the offender absconded, in 9 cases 16 persons were prosecuted and the conviction of 5 persons in 4 cases obtained, and in 1,377 cases the offenders compounded. The apparent increase in the number of cases is, the Divisional officer states, due to the records being more

accurately kept up. Almost all the cases are believed to be of a very petty nature. The application of the forest rules has received the careful attention both of the Deputy Commissioner and Forest Officer.

Protection from fire.

215. Part of the Jalhunder block, with an area of 2,885 acres, was again successfully protected from fire at a very small cost. In this block there is a great deal of young sandal which promises to come on well and appears to have benefitted by the protection of the previous year.

Yield and working.

216. The South-eastern, the Rathgurh and Bassiagond and the Apchund forests are worked on a rotation liable to modification as results render expedient. Four-fifths of the Rathgurh and Bassiagond forests, three-fourths of the Apchund forests were thus closed. In the South-east forests the arrangement specified in paragraph 256 of the forest report for 1877-78 has been modified by increasing the number of compartments, thus lengthening the period for which each portion of the forest will be closed after working. These arrangements though crude must tend to the preservation if not the improvement of the forest, and are therefore to be commended.

Yield.

217. The following is, it is believed, a fairly accurate return of the yield of the forests :—

Wood for house building and agricultural purposes.				Firewood.				Charcoal.				Grass.			
Poles.															
Teak.	Other than teak.	Logs, other kind.	Planks.	Cart loads.	Joti loads.	Buffaloe loads.	Head loads.	Cart load.	Buffaloe loads.	Head loads.	Bambus.	Pulas.	Cart loads.	Buffaloe loads.	Head loads.
1,432	1,444	47	22	33,001	2	4,092	64,517	10	162	7,541	220,501	29,500	410	223	2,814

These figures show a satisfactory increase in the demand for fuel. Under timber also as well as several other heads, the out-turn is somewhat larger than in the previous year.

218. The number of cattle grazed is returned by the Divisional Officer as

Buffaloes	42,294
Oxen	183,591
Ponies and donkeys	865
Sheep and goats	14,739

These figures probably represent something more than the actual numbers, as some of the cattle found, grazing without license, and on account of which grazing dues were paid as a penalty must subsequently have taken out grazing license.

Financial results.

219. The receipts and charges for the two past years have been as follows :—

Year.	Receipts.	Charges.			Surplus.
		Executive, protective and A. Charges.	Control charges.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1880-81 ...	48,330	13,606	5,248	18,848	29,482
1881-82 ...	55,399	13,076	7,785	20,861	34,538

The control charges were higher in the past year, as in the more careful apportionment of these charges for 1881-82 a somewhat larger share has fallen to debit of these forests than was charged to them in 1880-81; still the net as well as the gross receipts show a very satisfactory increase. Leaving out of account charcoal and mohwa, under which heads the revenue was a little less, owing in respect of mohwa to the partial failure of the crop, the revenue from all sources has increased,—a fact creditable to the officer who has had the general control and supervision of the revenue arrangements. Lac is now being made a means of increasing the income, and already an increase of Rs. 4,200 has been secured from this source in the Rehli Tehsil alone.

DAMOH DIVISION.

Area and boundaries.

220. The area has undergone no change. Regarding the state of the boundaries there is nothing to record.

Protection and improvement.

221. The following establishment, permanent and temporary, has been employed under the District Officer.

1 Forest Ranger,
1 Jamadar,
12 Duffadars and Moharirs,
124 Chuprasis and guards.

If the number of offences reported may be accepted as an indication of the efficiency of the protective arrangements, this establishment has worked well. Only 54 offences appear to have occurred. In these cases the 102 offenders were prosecuted with the result that in 47 cases 89 persons were convicted.

222. Thirty-one blocks of forest aggregating 139,038 acres have been under stricter protection than the rest of the forests being closed against the cutting of green wood.

223. The Deputy Commissioner notes that most of these forests have escaped fire. A mistake has been made if not in stopping grazing, at least in preventing the removal of grass from these areas.

224. Some bambus put out in the "Kishun talao" forest, near the station of Damoh, are said to be doing well.

225. The Deputy Commissioner records great improvement in the condition of the forests which he states is apparent not only in those areas strictly closed, but also in some that are being worked.

226. There has been no change in the arrangements for the general management and working of the forests.

General management.

Receipts and charges.

227. The receipts and charges for the past two years are given below:—

	1880-81.	1881-82.
	Rs.	Rs.
Receipts ...	52,098	65,671
Charges ...	11,035	12,803
Surplus ...	41,063	52,868

The revenue under all heads has risen, but the main increase is under minor produce, and resulted from the high bid of 17,000 rupees for the lac lease of the district. The distribution of the forests among the peopled area, in which respect a large portion of the Damoh and Saugor forests present favourable conditions, is the chief cause of this rise. Of the total increase in receipts about Rs. 1,700 resulted from license vendors' commission being in the previous year deducted from the receipts, which also accounts, almost fully, for the increase of Rs. 1,768 in the expenditure Considering its relation to the income and the low rates at which forest produce generally is sold, the charges must be regarded as extremely moderate.

SEONI DIVISION.

Area.

228. The area of the forests is the same as at the close of 1880-81.

Boundaries.

229. The District Forest officer states that the boundaries are maintained in the well defined condition in which they were left after the Settlement, and that they are all cleared annually by the proprietors of adjoining villages who are permitted to apply to their own use the grass and other material thus cut of the boundary lines. The Deputy Commissioner in endorsing this statement remarks that in some of the Kedarpur forests the clearing of the lines had not been carried out, but that steps were being taken to have this work completed.

Establishment.

230. The establishment employed under the divisional officer in these forests has been—

1 Forest Ranger,
1 Forest Guard,
1 Sadar Moharir,
12 Duffadars,
2 Tahsil Moharirs,
65 Chaprasis.

The Ranger is charged with the general supervision of the subordinate establishment and the checking of license vendors' accounts, in which he is assisted by a senior Duffadar. The chief duty of the rest of the establishment is to prevent the removal of produce without license or from areas for the time being closed against cutting.

Forest offences.

231. The number of offences brought to light by the establishment was 222. In 32 cases 48 persons were prosecuted, and conviction was obtained in every case though 3 persons were acquitted. In the remaining 190 cases the 226 offenders compounded.

Arrangements for working of the forests.

232. The following areas are worked on rough working plans prepared by Messrs. Mckee and Dobbs.

	Area, acres.	Divided into— Blocks.	Compartments.
1st, the Ambagarh and Dalal forests...	14,000	3	20
2nd, the Khawasa, Agri and Katigarh forests	25,540	3	16
3rd, the Ugli forests	58,304	...	10

In the Bijna and Bhairobun forests the felling of the more valuable produce of the forests has been restricted, permission to fell such produce being only sparingly given to meet absolute wants. Regarding merits of the arrangements in 2nd and 3rd forests above noted, the Conservator cannot write with certainty. In the Ambagarh and Dalal blocks the present arrangement is considered well adapted to existing conditions. Well grown trees of certain species valuable as building material or as yielding useful annual products are preserved, while the cutting of all else on a rotation of 8 years is allowed. This arrangement is only provisional and is open to alteration and improvement as circumstances may render expedient or possible. From the remaining area of the forests, with the exception of a few specially protected species, purchasers are allowed on payment to remove what they desire.

Yield.

233. The yield of the 2nd class reserves and unreserved forests managed jointly with them was as follows:—

Wood for house building and agricultural purposes.				Fuel.		Charcoal.		Bambus.			Grass.	
No. of poles.	Cart loads	Head loads.	Bhangy loads.	Cart loads.	Head loads.	Cart loads.	Head loads.	Number.	Cart loads.	Head loads.	Cart loads.	Head loads.
31,957	1,169	14,207	158	4,784	29,635	281	9,183	289,848	1,071	12,614	1,753	9,940

234. The amount of stock grazed in the forest was:—

Buffaloes	...	No.	24,078
Cows and bullocks	...	„	179,585
Goats	...	„	11,495

Receipts and charges.

235. The receipts and charges for the past two years are as follows:—

Year.	Receipts.	Charges.			Suplus.
		Executive, protective and A. charges.	Control charges.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs
1880-81 ...	48,395	8,705	2,782	11,487	36,908
1881-12 ...	50,441	8,494	6,022	14,516	35,925

The receipts have again risen, and amount to Rs. 300 more than in 1879-80. The receipts from bambus have fallen off, probably owing to the large number that died after seeding. Under fuel there was a falling off, which is almost counterbalanced by increased receipts from commutation. Minor produce shows a rise of Rs. 729, and is doubtless capable of further development. The difference under expenditure is in the control charges, which have been more correctly apportioned than in the previous year.

MANDLA DIVISION.

Area and boundaries.

236. There has been a slight decrease of 353 acres in the area of the 2nd class reserves as shown in Form 49A. Regarding the state of boundaries little can at present be stated: some of the demarcation came under the Conservator's inspection, and was found clear and distinct, and the Deputy Commissioner records that attention has been given to the maintenance of boundaries, but the accuracy of the boundaries as defined require checking, and for this, arrangements have been made.

Establishment.

237. The protective measures are the prevention of the felling of teak, sal, saj, and beeja without special sanction of the Deputy Commissioner, and preventing grazing or the removal of produce without license or the unauthorized breaking up of forest land, and for these purposes the establishment employed was:—

1 Forest Ranger,
3 Jemadars,
4 Daffadars,
1 Forest Guard,
11 Moharirs,
112 Chaprasis.

Forest offences.

238. The number of forest offences reported was 2,098. In 339 cases 391 persons were prosecuted, and in 318 cases, 351 persons were convicted. The Deputy Commissioner is of opinion that most of the cases should have been compounded, it is presumed, by the Tahsildars in exercise of their power as forest officers. In 1,780 cases the persons concerned were allowed to pay for the produce or grazing they had obtained.

239. Good appears to have been done in preventing erratic cultivation and inducing the Bygahs to settle down on open lands where there is good soil fit for permanent cultivation.

240. Hurra was again collected on account of Government, but the result cannot yet be given. The crop was better than that of the preceding year, which sold during the year under report for Rs. 1,867, giving a profit of Rs. 1,429.

Receipts and charges.

241. The receipts and charges of the past and preceding year were as follows:—

		1880-81.	1881-82.
		Rs.	Rs.
Receipts	...	76,433	83,334
Charges	...	10,468	15,303
Surplus	...	65,965	68,031

Allowing for the recovery of outstandings the receipts were nearly Rs. 4,000 in excess of those for 1880-81 and a trifle in excess of those of the year previous. The increase in the expenditure is due to increase of temporary establishment and partly to the larger collection of hurra not yet sold. Compared with the income the charges are light, and the financial result of the year's transactions are I think very satisfactory.

242. The Commissioner has urged as a means of increasing the revenue, the encouragement of lac production, and this should by all means be tried, though I doubt its succeeding here as in Saugor and Damoh.

HOSHANGABAD DIVISION.

Area and boundaries.

243. The forest area is, as at the close of 1880-81, 1,189 square miles. The boundaries are not generally well defined, and a special establishment has been sanctioned for the purpose of checking them and bring the demarcation to a proper condition.

Protection.

244. The establishment available for protective purpose under the Divisional officer was 1 Forester, 1 Forest Guard, 1 Jamadar, 10 Duffadars, 5 Moharirs and 106 Watchers. This establishment being deficient in the strength of the upper grades, a Ranger has since been posted to the Division. The number of cases of breach of forest rules reported was 99. In 45 cases 89 persons were prosecuted and the conviction of 69 persons in 39 cases obtained. In the remaining 54 cases the 54 offenders compounded.

Working and management of the forest.

245. No change in the condition under which the public is allowed to supply its wants from these forests has been intimated to this office. The whole area is open for the removal of produce with the exception of teak, saj, and beeja, which may not be felled without the special sanction of the Divisional officer and selection by a Forest subordinate.

246. The Conservator suggested certain measures for the better conservation of these forests, the main object of which was to check the diminution in the value of the standing crop which he believes to be going on, though the bulk of the standing crop may not in any way have decreased. The Conservator's proposals were objected to by both the Commissioner and Deputy Commissioner and consequently were not adopted. The only course now open is to place portions of the area on a separate footing as permanent reserves. Proposals on this point will shortly be submitted for the Chief Commissioner's consideration.

Yield.

247. The quantity of produce removed from the forests was as follows :—

Description of produce.	Number.	Cubic feet.	Cart loads.		Joti loads.	Pony and donkey loads.	Head loads.
			4 bullock.	2 bullock.			
Teak logs	103	1,018	...	...	...	...	...
Teak poles	8,389	...	...	...	...	...	...
Sleepers	5	...	...	...	...	...	...
Wood for house building, &c. ..	...	...	136	5,757	763	967	15,693
Firewood	...	...	123	23,557	...	383	34,592
Charcoal	...	...	...	94	...	1,183	...
Bambus	555,426	...	...	...	...	...	...
Grass	...	...	19	1,923	...	210	10,751

248. The amount of stock grazed in the forests during the year was as follows :—

	Number.
Buffaloes	21,515
Cows and bullocks	222,853
Camels	106
Ponies and donkeys	561
Goats and sheep	42,239

If these forests are to be properly administered it will be necessary to retain under the Divisional Officer better paid upper subordinates, and in this mattei the first step has been taken by the appointment of a temporary Ranger.

Breach of forest rules.

258. The number of offences reported was 64, but it is not possible to believe that there were not many more. With so small an establishment there would certainly be many that escaped notice. In 15 cases 43 persons were prosecuted and convicted. In the remaining 49 cases the 88 offenders compounded.

Protection of growing stock.

259. The forests on the Berar border remained closed against the cutting of bambus, and no where was the cutting of teak, saj or beeja allowed. Certain species yielding valuable annual products were also protected against cutting. In other respects the whole forest area was open for the cutting, collection and removal on payment of produce of all kinds.

Yield.

260. The following statement gives the yield of the forests :—

Forest produce.	No.	Cart loads.	Bullock loads.	Donkey loads.	Joti loads.	Head loads.
Wood for building and agricultural implements ...	...	1,074	21	...	585	9,532
Firewood ...	...	2,393	404	24	403	1,713
Charcoal ...	...	...	89	..	...	558
Bambus ...	3,40,025	...	...	...	...	...
Grass ...	...	4,083	2,602	...	...	24,873

These figures cannot include fuel taken under household commutation licenses.

261. The number of cattle grazed was as follows :—

	Buffaloes.	Cows and bullocks.	Sheep and goats.
On annual license ...	14,440	65,961	8,365
On license for 7 days only...	2,429	211,067	27,280

Receipts and charges.

262. The receipts and charges for the two past years are given in the following statement :—

Year.	Receipts.	Charges.			Surplus.
		Executive, protective and A. charges.	Control charges.	Total.	
		Rs.	Rs.	Rs.	Rs.
1880-81 ...	32,914	6,482	1,920	8,402	24,512
1881-82 ...	35,981	6,668	5,783	12,451	23,530

The receipts have risen and show a steady tendency to increase. There is a difference in the control charges in the year, resulting from their being more accurately apportioned for 1881-82.

NARSINGHPUR DIVISION.

Area and boundaries.

263. The area of the reserves in this district remains unchanged. In consequence of a series of disputes regarding the boundaries, a special establishment has been sanctioned to check and have them properly defined.

Breach of forest rules.

264. The district return exhibits only one forest offence as having occurred, but the district report refers to a number of other cases of removel of produce or grazing without permission in which the offenders were let off on paying for the produce.

General management.

265. In the conditions under which the people are allowed to draw on the forests there has been no change, except that some restrictions protective to the poorer classess have been placed on the rights conferred to lessees of the right to collect minor produce.

The Deputy Commissioner in his report makes several suggestions regarding the revenue arrangements which effect the working of the forests, but such matters must be separately dealt with.

Permanent reserves.

266. During the year under report it was not possible to select any areas for permanent reserves in this district. The area is so small that the whole will probably have to be retained.

Receipts and charges.

267. The receipts and charges for the past two years are given below:—

		1880-81. Rs.	1881-82. Rs.
Receipts	...	12,154	14,900
Charges	...	3,280	3,314
Surplus	...	8,874	11,586

The increase of Rs. 2,746 in the receipts has resulted chiefly from timber, grazing and fodder grass and minor produce. The rise of Rs. 1,058 under timber is remarkable, seeing that the Deputy Commissioner records that the latitude allowed to Malguzars in reference to the cutting of wood of the reserved kinds has made a larger supply available to the public from private forests.

CHHINDWARA DIVISION.

Area.

268. During the year unde report there was no change in the area of the reservers.

Boundaries.

269. From the Deputy Commissioner's report the conclusion is to be drawn that the demarcation of the 2nd class reserves in Chhindwara is not in a more satisfactory state than in other districts. To check and improve the demarcation, a special establishment has been applied for and sanctioned in the current year.

Establishment.

270. Regarding the efficiency of the establishment the Deputy Commissioner speaks disparingly, and I am myself of opinion that he requires as assistants one or two better paid subordinates. No definite proposals on the subject have yet been made.

Forest offences.

271. The number of forest offences reported was 302. In 9 cases 12 persons were prosecuted, and 4 persons were acquitted. In 293 cases the 510 offenders were allowed to compound. The Deputy Commissioner records that most of the latter cases were due to ignorance

and not to disregard of the forest law, which is in itself a sufficient reason for the offenders being leniently dealt with.

272. The Deputy Commissioner records that with the view of stopping the destruction of "Kahu" which along the banks of rivers in the Malguzari lands was being extensively felled for railway sleepers, he permitted to a certain extent the felling of saj in the Government reserves, but that in other respects the Government forests have been closed against the cutting of wood of the better kinds, of which the supply in the Government forests is at present small, while demands for such produce can at present be met from private forests.

Receipts and charges.

273. The receipts and charges of the past two years are given below:—

		1880-81.	1881-82.
		Rs.	Rs.
Receipts	...	27,415	29,360
Charges	...	7,851	7,878
Surplus	...	19,564	21,482

The receipts are Rs. 1,945 higher than in the previous year. There was a slight falling off in the income from grazing, owing partly to losses from cattle disease and partly to the rain-fall being favourable to the production of grass, but this has been altogether counterbalanced by the larger proceeds from sale of fuel and the increase in revenue from bambus and building wood.

Though as the Deputy Commissioner himself implies there may be room for improvement, I consider that the forest administration of this district has been as successful as the agency available rendered practicable.

CHHATTISGARH DIVISION.

274. Regarding the forest administration in the districts of Raipur, Sambalpur and Bilaspur, the Commissioner, Chhattisgarh Division, gives the following brief account;—

"2. The Government forests to be noticed are the 2nd class reserves, and their areas were as in the previous year, namely,—

Area of Government forests.

Raipur	...	1,376 square miles.
Bilaspur	...	649 "
Sambalpur	...	715 "

"3. The Deputy Commissioner of Raipur reports that nothing as yet has been done towards demarcating the Government forests in his district, and the work must now remain over until orders issue in regard to the proposals recently made by Mr. Thompson, Deputy Conservator, for taking up the more valuable as first class reserves."

Demarcation of Government forests.

"In the feudatory Zamindari of Khairagarh however some progress was made in demarcating the Zamindari reserves, and the Deputy Commissioner writes, 'the blocks referred to in paragraph 15 of last year's annual report have had their boundaries cleared and Patwaris were specially appointed to mark off the areas of the villages which fall within those blocks.'"

"In the Bilaspur district the boundary marks, the Deputy Commissioner writes, require improvement, and he is preparing an estimate with a view to this improvement being effected."

"The subject has not been noticed by the Deputy Commissioner of Sambalpur, and he has been asked for information on the point."

"4. The great value of the forests of the Raipur district has been proved by the recent inspection by Mr. Thompson, and I trust that during the coming open season he will be able to make a similar inspection of the forests of the Bilaspur district and of the Zamindari portion of the Sambalpur district. When this has been done the importance of the noble forests in this division will be fully seen, and I have little fear but that all necessary action will then be taken to ensure their proper administration."

System of management.

"The system of management sanctioned for the Raipur district in letter No. 2840-148, dated 2nd August 1881, from the Secretary to the Chief Commissioner, came into actual operation in the Khalsa of Raipur from the 1st December 1881, and has worked satisfactorily both in protecting the Government forests and in meeting the wants of the people, and is being gradually extended to the Zamindaris."

"In Bilaspur the system previously in force was continued during the year, but after Mr. Thompson's inspection has been made it will probably be advisable to assimilate the Bilaspur arrangements to those obtaining in Raipur. The system of management in Sambalpur continued defective during the year, and I trust it will be superseded before long by arrangements following the Raipur lines."

"5. Excluding the fixed forest assessment paid by the Zamindars the gross collections in 1881-82 and the previous year were,—

Gross receipts.

		1880-81. Rs.	1881-82. Rs.	Increase. Rs.
Raipur	...	52,912	56,392	3,480
Bilaspur	...	13,759	16,439	2,680
Sambalpur	...	7,780	9,677	1,897

"Thus a considerable increase of income took place in each of the districts.

Cost of establishment and contingencies.

"6. The cost of establishment and contingencies was;—

		1880-81. Rs.	1881-82. Rs.	Difference. Rs.
Raipur	...	7,032	10,560	+3,528
Bilaspur	...	2,400	3,105	+ 705
Sambalpur	...	4,416	3,868	— 548

ing in the following proportions to the gross receipts collected :—

		1880-81. Rs.	1881-82. Rs.
Raipur	...	13·3	18·7
Bilaspur	...	17·4	18·8
Sambalpur	...	56·7	40·0

"The great increase in Raipur was chiefly due to charges connected with Mr. Thompson's deputation to that district."

"7. The net revenue realized in the three districts was consequently

		1880-81. Rs.	1881-82. Rs.	Difference. Rs
Raipur	...	45,880	45,832	— 48
Bilaspur	...	11,359	13,334	+ 1,975
Sambalpur	...	3,364	5,809	+ 2,145

"Both Bilaspur and Sambalpur thus obtained a considerable increase, and the decrease in Raipur was caused by the charges incidental to Mr. Thompson's deputation having been debited to the Raipur receipts."

"8. In the Chief Commissioner's Forest review for 1880-81 it was remarked that the Divisional report for that year 'has, it is believed, shown among persons prosecuted, persons who were allowed to compound by a money payment.' But this was not so, as will be seen from the following figures subsequently given for 1880-81 by the several Deputy Commissioners ;—

Forest prosecutions.

		No. of persons prosecuted for forest offences.	No. of persons in regard to whom forest offences were compounded.
Raipur	...	326	78
Bilaspur	...	4	20
Sambalpur	...	260	1,758

"In 1881-82 the number of persons prosecuted for forest offences was

Raipur	...	38
Bilaspur	...	3
Sambalpur	...	50"

275. The number of cases in which the offenders were allowed to compound were as follows :—

Raipur	...	106
Bilaspur	...	115
Sambalpur	...	1,987

The recorded offences in Raipur and Bilaspur are decidedly few in number. That they should be more numerous in Sambalpur is not surprising, seeing that Forest organization there commenced more recently, while considering the accessibility and value of some of the forests the establishment employed is very small.

Selection of permanent reserves.

276. During the year under report the forests of the Raipur district were examined and reported on. The separate demarcation of certain areas to be permanently maintained for the supply of wood, bambu and grass has been suggested, and with the Chief Commissioner's approval this work will commence in the coming open season. It will be expedient as far as present circumstances renders practicable to complete this undertaking in Raipur before commencing to deal with the requirements of the other two districts.

Unreserved Forests.

277. Regarding the unreserved forests there is nothing special to record. Owing to the reversion to Government of the right in certain waste lands, the area is now 185,070 or 4,930 acres more than in the previous year.

Though not under the operation of the forest law they have been managed jointly with the 2nd class reserves, and the revenue and expenditure resulting from them have not been separately recorded.

CHAPTER IV.

General Remarks.

Exotics.

278. Of the exotics of which seed has from time to time been supplied for experiment, the "Mesquit bean" having been discarded as unsuccessful, there remain the Mahogany, the Eucalyptus, the Carob and the Saman to report on.

Mahogany.

279. Of the Mahogany, the trees at Moharli continue to thrive, though it is evident that on such sandy soils in this climate, the species requires watering for several years. On the black cotton soils the tree takes kindly. The trees put out on such soils in Nagpur are thriving, though their success has varied with the treatment to which they have been subjected. The most successful are those planted with bambu in a moist locality on raised ridges under a crop of "tur" and "castor oil."

Eucalypti.

280. Of the Eucalypti, there are four varities now living, one, of which, there are several trees flourishing at Garhakota, is said to be "rostrata" but this is not certain. For the "Eucalyptus saligna" the rich black soils are too forcing, while on the sandy soils the white-ants are found too troublesome to leave hope

of its success. In Nagpur there are only one or two of this species left, while in Chanda 74 trees were killed of by white ants, leaving only 86. Of "Eucalyptus dichromofolia" there are two in Nagpur, which though growing slowly are healthy, and seem to have adapted themselves to the climate. Of the "Eucalyptus crebra" which failed on black soil, there are two thriving on less fertile red soil derived from trap.

281. The Carob has only been really successful at Rukur at the top of the Korai ghat. The trees in this place are very healthy; they flowered freely last season, though no fruit was set. Evidently for the production of fruit, the only recognised use, very systematic cultivation and treatment is necessary.

282. The "Pithecolobium saman" has succeeded in many places, and in these Provinces will thrive in any rich soil. Its utility is however as yet doubtful.

Tea.

283. It is worthy of note that some tea put down in the Banjar experimentally has come on sufficiently well to justify the hope that in the uplands of Mandla and Balaghat a field for the tea producing industry may be found.

284. The Telinkherri estate was used for experiments with exotics and indigenous species, among which may be noted the cultivation of the bambu under different conditions, the anjun, mohwa, beejasal, tinnus, mohka and many other forest trees; the cultivation of guava as a wood yielding tree, of the pipal as a fodder yielding tree, the gular, tamarind and other plants as hedges, while experiments are carried out to test the value of various species as nurses for forest trees in exposed positions and on different soils. At the same time, to cover the cost of the garden which has to be kept up, a little land is kept under cultivation and the orange groves have been extended by the planting out of selected stock.

285. The outlay on this estate amounted to Rs. 2,963 and the receipts to Rs. 1,671, thus giving a deficit of Rs. 1,292. of which about Rs. 350 may be debited to the extension of orange groves, and the balance to protection of the area now stocked with wood and bambus, the planting of small areas and the experimental cultivation of different species for various purposes.

Notice of Officers.

286. Of the Deputy Conservators, I would first mention Mr. Thompson and Mr. Whittall. The former was for the first part of the year in charge of the Chanda Division, and to his exertions are mainly due the good results secured in that Division; he was subsequently deputed to examine the forests of Raipur, on which he submitted a very able report. Mr. Whittall has proved himself in every respect an able officer, and by his devotion to his work and the energy he has brought to bear on the working of his Division has established a claim to the highest commendation.

Captain Losack, Deputy Conservator, and Mr. Foster, Officiating Deputy Conservator, also merit notice. It has been the unpleasant duty of the former to hold charge of a Division, which notwithstanding the high value of its forests, does not as yet return a surplus, but he has been indefatigable in his exertions to put the working of his Division on such a footing as will ensure financial success in the future. Mr. Foster has been successful in all his undertakings.

Mr. Hooper, Assistant Conservator, rendered excellent service, first as an Assistant in the Conservator's office, and subsequently as the controlling officer in the Chanda Division.

Mr. Fowler, Assistant Conservator, though yet comparatively new to the country, rendered good service on demarcation and other work in Nimar.

Mr. Taylor and Mr. Anthony, Officiating Assistant Conservators, both rendered good service as Assistants to Divisional Officers. Mr. Taylor held for

a short time the charge of the Chanda Division, but was unfortunately for some time more or less incapacitated for hard work from sickness contracted in the Ahiri forets.

287. Of the Forest Rangers, Mahomed Ghouse of the 1st class and Mahadeo Rao Puhitkar, officiating in the 2nd class, merit prominent notice. The former has more than once acted as a Divisional Officer.

Subordinates.

The following Forest Rangers have rendered really good service and merit favourable mention :—

Mahomed Khader Bux,
Mahomed Sillamon,
Gunput Rao,
Mahomed Yasseen.

288. Before closing this report I must advert to the delay there has been in Divisional monthly returns and accounts of stock reaching this office and which throws on the Conservator's office an unduly large amount of work to be got through after close of the year, and, apart from other disadvantages, delays the preparation of the annual returns. The stock accounts for the three last months of 1881-82 only came to hand between 16th May and 30th June, March's arriving on the latter date. I am now satisfied that this is in no way due to want of exertion on the part of Divisional Officers, who have done their best with the means at their disposal. The Conservator has hesitated to propose increase of expenditure on Office establishment, but it is now evident that without improvement in this section of the establishment, which cannot be secured without some further outlay, there is, except in one or two instances, no hope of securing that degree of punctuality which is desired in the submission of monthly accounts and returns. The matter is only adverted to here as it has rendered the past year's annual report and returns much later than they would have been. It will be fully dealt with in a separate reference setting forth the requirements of each Division.

J. C. DOVETON,

Conservator of Forests,

Central Provinces.

List of Appendices to the Forest Report for the year 1881-82.

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Annual Form No. 49.—[Prescribed.]

FOREST DEPARTMENT CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1881-82.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1881.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1882.		No. and date of Notification of addition or transfer.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Direction.	Bilaspur District...	Hathibari ...	2,123	3	..	...	2,123	3	Chief Commissioner's Notification No. 917 of 24th February 1879.
	Raipur „	Kuntranala ...	3,548	6	...	..	3,548	6	
Mandla Division.	Mandla „	Jugmundal ...	24,503	38	...	...	24,503	38	
	Do.	Chuharigogarh ...	1,660	3	...	...	1,660	3	
	Do.	Banjar valley ...	49,724	78	...	...	49,724	78	
	Do.	North Phen ...	6,435	10	...	...	6,435	10	
	Do	South Phen ...	45,967	72	...	...	45,967	72	
	Do.	Moti Nala ...	1,658	3	...	...	1,658	3	
	Do.	Airi ...	2,150	3	...	...	2,150	3	
	Do.	Barela ...	7,153	11	...	...	7,153	11	
	Balaghat „	Keolikapa	6,296	10	...	...	6,296	10	
	Do.	Topla ...	45,506	71	...	...	45,506	71	
	Jubbulpore „	Bijragogarh ...	21,188	33	...	...	21,188	33	
	Do.	Lower Gour ...	...	...	A. 5,517	...	5,517	9	
	Damoh „	Singrampur ...	6,555	10	...	...	6,555	10	
Hoshangabad Division.	Hoshangabad District ..	Rajaborari ...	1,61,645	253	...	...	1,61,645	253	
	Do.	Bori ...	39,680	62	...	...	39,680	62	
	Hoshangabad and Betul Districts...	Saonligarh ...	65,771	103	B. 28,270	...	94,041	147	
Betul Division.	Betul District ...	Bowergarh ...	75,520	118	...	...	75,520	118	
	Do.	Khamapur ...	1,08,012	169	...	...	1,08,012	169	
Nimar Division.	Hoshangabad District ...	Kalibheet ...	1,66,400	260	...	...	1,66,400	260	
	Nimar District ...	Punassa ...	91,720	143	...	...	91,720	143	
	Do.	Chandgarh ...	61,440	96	...	...	61,440	96	
	Do.	Khandwa ...	35,840	56	...	...	35,840	56	
Chanda Division.	Ahiri Zemindari in Chanda District ...	Bimaram ...	12,296	19	...	...	12,296	19	
	Do.	Mirkullu ...	8,479	13	...	...	8,479	13	
	Chanda District ...	Mohurli ...	2,29,498	359	...	...	2,29,498	359	
Seoni Division.	Balaghat and Seoni Districts ...	Sonawani					52,520	82	
		Korai	2,38,754	373	...	...	62,770	98	
	Seoni and Nagpur Districts ...	East Pench					1,23,464	193	
	Chhindwara and Nagpur Districts.	West Pench ...	60,938	95	...	...	60,938	95	
Saugor Division.	Saugor District ...	Garhakota ...	2,899	5	...	...	2,899	5	
	Do.	Tigora ...	459	...	...	...	459	...	
	Do.	Rangir ...	11,036	17	...	...	11,036	17	
	Do.	Ranipura ...	8,109	13	...	...	8,109	13	
	Do.	Hathkho ...	19,492	31	...	...	19,492	31	
		Total ...	16,22,454	2,535	33,787	...	16,56,241	2,588	

A.—Transferred from the Jubbulpore 2nd Class Reserves declared reserve by Notification No. 887 of 20th February 1879.

B.—Correction of recorded area previously entered without aid of a map.

Annual Form No. 49 A.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 2nd Class Reserved Forests, 1881-82.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1882.		Added during the year.	Excluded or transferred to other heads.	Area of 31st March 1882.		Number and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nagpur Division ...	Nagpur ...	2nd Class Reserves.	2,49,785	390	...	...	2,49,785	390		
Civil officer ...	Bhandara ...	Do. ...	3,52,640	551	...	...	3,52,640	551		
Chanda Division ...	Chanda ...	Do. ...	19,05,399	2,977	...	...	19,05,399	2,977		
Civil officer ...	Wardha ...	Do. ...	1,28,034	199	...	...	1,28,034	199		
Do. ...	Balaghat ...	Do. ...	6,08,089	950	...	...	6,08,089	950		
Do. ...	Jubbulpore ...	Do. ...	2,16,019	337	...	A. 5,517	2,10,502	329		A. Area of the Lower Gour forest now a 1st Class reserve.
Saugor Division ...	Saugor ...	Do. ...	4,74,488	741	...	...	4,74,488	741		
Civil officer ...	Damoh ...	Do. ...	5,34,743	834	...	...	5,34,743	834		
Seoni Division ...	Seoni ...	Do. ..	3,54,306	554	...	...	3,54,306	554		
Civil officer ...	Mandla ...	Do. ...	14,00,565	2,189	B. 432	C. 785	14,00,212	2,188	B. No. 2984, dated 12th August 1881.	
Betul Division ...	Betul ...	Do. ...	5,45,452	852	...	...	5,45,452	852	C. No. 3811, dated 20th October 1881.	
Civil officer ...	Chhindwara ...	Do. ..	4,10,412	641	...	...	4,10,412	641		
Hoshangabad Division ...	Hoshangabad ...	Do. ...	7,61,064	1,189	...	...	7,61,064	1,189		
Civil officer ...	Narsinghpur ...	Do. ...	1,23,712	193	...	...	1,23,712	193		
Nimar Division ...	Nimar ...	Do. ...	9,65,486	1,509	...	...	9,65,486	1,509		
Civil officer ...	Raipur ...	Do. ...	8,81,280	1,377	...	...	8,81,280	1,377		
Do. ...	Sambalpur ...	Do. ...	4,57,600	715	...	...	4,57,600	715		
Do. ...	Bilaspur ...	Do. ...	4,15,360	649	...	...	4,15,360	649		
		Total ...	1,07,84,443	16,850	432	6,302	1,07,78,573	16,842		

Annual Form No. 49 B—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Unreserved Forests, 1881-82.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1881.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1882.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Seoni Division ...	Seoni District ...	Unreserved Forests.	1,25,587	196	...	...	1,25,587	196		
Nagpur do. ...	Nagpur do. ...	Do.	5,000	8	...	...	5,000	8		
Chanda do. ...	Chanda do. ...	Do.	114	...	...	...	114	...		
Civil officer ...	Damoh do. ...	Do.	14,413	22	...	...	14,413	22		
Do. do. ...	Balaghat do. ...	Do.	35,026	55	A. 3,703	...	38,729	61		A. B. Forest land the right in which has reverted to Government.
Do. do. ...	Chhindwara do. ...	Do.	...	...	B. 1,227	...	1,227	2		
		Total ...	180,140	281	4,930	...	1,85,070	289		

Form No. 51.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Forest tracts protected from fire during the dry season of 1882, to accompany Report for 1881-82.

Division.	Forest tracts.		Up to 30th June 1881.		During dry season of 1882.				Total cost up to 30th June 1882.	Year in which protection commenced.	Remarks.
			Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected	Amount expended.			
			Acres.	Rs. a. p.	Acres.	Acres.	Acres.	Rs. a. p.	Rs. a. p.		
Direction... ..	Hathibari	Whole ...	2,123	2,758 15 7	2,123	...	2,123	81 4 8	2,840 4 3	June 1870	
	Kuntranala	„ ...	2,366	219 1 4	3,548	3,548	...	53 8 8	272 10 0	„ 1876	
Mandla Division ..	Banjar valley	„ ...	49,045	3,287 6 3	49,495	5	49,490	589 4 2	3,876 10 5	„ 1875	
	Motinala	„ ...	1,659	279 10 11	1,659	..	1,659	56 10 0	336 4 11	„ 1875	
	Jugmundal	„ ...	24,383	18,893 9 2	24,503	163	24,340	540 4 3	19,433 13 5	„ 1867	
	Chuharigogarh	„ ...	1,661	4,743 1 11	1,661	...	1,661	71 5 0	4,814 6 11	„ 1867	
	Barela	„ ...	7,153	1,374 15 11	7,153	...	7,153	152 5 0	1,527 4 11	„ 1872	
	Airi	„ ..	2,147	39 5 9	2,150	...	2,150	39 3 9	78 9 6	„ 1878	
	Singrampur	„ ...	6,555	1,892 8 10	6,555	5	6,550	134 12 9	2,027 5 7	„ 1871	
	Bijeragogarh	„ ..	21,188	4,693 1 6	21,188	...	21,188	487 5 3	5,180 6 9	„ 1871	
	Lower Gour	Paraspani block ...	...	... .	2,000	...	2,000	71 14 9	71 14 9	„ 1882	
Hoshangabad Division..	Rajaborari	Machak „ ..	1,02,620	2,903 7 4	10,240	440	9,800	518 11 2	3,422 2 6	„ 1875	
	Do.	Gunjal „ ...			54,080	200	53,880			„ 1875	
	Do.	Ajnal „ ...			38,400	10	38,390			„ 1875	
	Saonligarh	Dehkna „ ...	70,251	1,861 4 7	49,920	3,200	46,720	301 11 7	2,163 0 2	„ 1875	
	Do.	Tokra „ ..			28,160	10,240	17,920			„ 1875	
	Bori	Bori „ ...	23,680	13,679 6 5	23,680	...	23,680	673 4 3	14,352 10 8	„ 1864	
	Do.	Dhain „ ...	16,000		16,000	2,880	13,120			„ 1879	
Nimar Division ..	Kalibhit	Jai Malur „ ..	62,073	1,072 0 10	62,080	269	61,811	254 15 9	1,327 0 7	„ 1874	
	Punassa	Block No. I ...			7,680	570	7,110			„ 1875	
	Do.	„ „ II ..			9,720	9,720	...			„ 1875	
	Do.	„ „ III ..			6,680	6,680	...			„ 1875	
	Do.	„ „ IV ...			9,840	9,840	...			„ 1875	

	Do	„	„	V	...	60,985	4,265	3	9	9,600	9,600	...	954	8	4	5,219	12	1	„ 1875
	Do.	„	„	VI	...					10,880	10,880	...							„ 1877
	Do.	„	„	VII	...					9,180	9,180	...							„ 1879
	Do.	„	„	VIII	...					8,500	8,500	...							„ 1880
	Do.	„	„	IX	...					8,960	8,960	...							„ 1881
	Do.	„	„	X	...					10,680	10,680	...							„ 1882
	Chandgarh			Whole	...	30,920	1,246	12	9	61,440	7,295	54,145	697	15	4	1,944	12	1	„ 1878
	Khandwa			„	...	35,760	2,757	9	5	35,840	2,256	33,584	638	2	5	3,395	11	10	„ 1878
	Bainpura			„	...	600	50	9	0	600	...	600	12	0	0	62	9	0	„ 1879
	Gunjari			„	...	3,500	148	0	0	3,500	...	3,500	20	1	6	168	1	6	„ 1879
	Undria Booria			„	...	3,090	56	2	3	3,100	8	3,092	18	0	0	74	2	3	„ 1879
	Bhojwa Beheria			„	...	2,000	56	8	6	2,000	...	2,000	31	9	1	88	1	7	„ 1879
	Ajnal			„	...	1,500	95	1	9	1,500	...	1,500	26	4	0	121	5	9	„ 1879
	Chooria			„	..	170	10	14	0	170	...	170	...	...	...	10	14	0	„ 1880
Betul Division	... Bowergarh			Part	...	37,760	3,238	9	11	38,720	10,666	28,054	616	0	0	3,854	9	11	„ 1875
	Khamapur			„	...	16,000	619	0	6	16,000	...	16,000	247	2	9	866	3	3	„ 1875
Chanda Division	... Bemarum			Whole	...	12,296	10,278	9	8	12,296	...	12,296	840	9	9	11,119	3	5	„ 1873
	Mirkalloo			„	...	8,479	6,074	0	0	8,479	...	8,479	801	10	8	6,875	10	8	„ 1875
	Taroba block			„	...	24,472	7,642	10	0	25,619	110	25,509	1,188	4	0	8,830	14	0	„ 1873
	Goverdhun „			„	...	13,931	4,230	15	8	13,931	...	13,931	669	13	5	4,900	12	8	„ 1874
Seoni Division	... Korai Range,	Korai block			...	31,210	7,647	9	9	31,210	...	31,210	494	9	2	8,142	2	11	„ 1869
	Do.	Sakata block			...	10,020	386	1	6	10,020	...	10,020	156	3	10	542	5	4	„ 1880
	East Pench,	Part only			...	42,580	4,078	3	2	42,580	...	42,580	607	4	11	4,685	8	1	„ 1875

Form No. 51.—(Continued).

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Forest tracts protected from fire during the dry season of 1882, to accompany Report for 1881-82.

Division.	Forest tracts.		Up to 30th June 1881.						During dry season of 1882.												Total cost up to 30th June 1882.			Year in which protection commenced.		Remarks.
			Area actually protected.		Total cost.				Area attempted to be protected.		Failures.		Actually protected		Amount expended.											
			Acres.		Rs.	a.	p.		Acres.		Acres.		Acres.		Rs.	a.	p.		Rs.	a.	p				
	West Pench	Nagulwari block ...	9,680		809	10	2		9,680		...		9,680		101	13	1		911	7	3	June	1878		
	Do.	Paraspani block ..	8,240		164	6	8		8,240		...		8,240		86	5	4		250	12	0	„	1879		
	Do.	Narhar „ ...	39,040		323	8	6		39,040		2,000		37,040		410	12	10		734	5	4	„	1881		
Saugor Division ...	Garhakota	Whole ...	2,899		101	3	1		2,899		5		2,894		20	5	0		121	8	1	„	1875		
	Hathkho	Part only ...	10,598		1,639	6	8		10,598		...		10,598		370	0	6		2,009	7	2	„	1875		
	Rangir	„ ..	1,987		63	13	2		1,987		...		1,987		56	5	2		120	2	4	„	1875		
	Ranipura	„ ...	2,720		210	1	5		2,720		...		2,720		38	0	0		248	1	5	„	1879		
	Jalandhar	Whole ...	2,885		15	6	0		2,885		...		2,885		67	6	5		82	12	5	„	1880		
Balaghat Division ..	Pandratola	„ ...	4,960		192	2	3		4,960		640		4,320		73	14	7		266	0	10	„	1872		
Wardha Division ...	Dhuga	„ ...	14,171		277	15	3		14,171		987		13,184	}	478	1	10	}	788	3	7	„	1880		
	Erjhar	„ ...	11,911		32	2	6		11,911		1,152		10,759									„	1880		
		Total ...	8,37,288		1,14,410	5	2		9,04,582		1,30,689		7,73,893		13,749	12	11		1,28,160	2	1				

Charged in previous years ...	1,07,579	10	7
Charged in 1881-82 ...	*13,304	12	7
Charged in 1882-83 ...	7,275	10	11
Total ...	1,28,160	2	1

*There was also expended Rs. 2-8-0 on Tigora Reserve.

Annual Form No. 52.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest Rules during 1881-82

Forest Division and Civil District.	Cases pending from 1880-81.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1st Class Reserves.														
Direction Division ...	...	..	...	...	...	..	..	..	...	..	...	...	..	...
Mandla " ...	...	...	4	...	...	4	4	2	5	1	3	3	8	1
Hoshangabad " ...	..	..	1	..	...	1	1	1	1	..	...	1	1	...
Betul " ...	..	..	2	...	...	2	2	2	2	..	..	2	2	...
Nimar " ...	...	3	1	1	3	8	8	8	10	...	1	8	11	...
Chanda " ...	...	...	1	...	...	1	1	1	7	...	.	1	7	...
Seoni " ...	..	..	3	1	1	5	5	4	16	1	2	5	18	...
Saugor " ..	...	...	1	..	...	1	1	..	...	1	1	1	1	...
Total ...	...	3	13	2	4	22	22	18	41	3	7	21	48	1
2nd Class Reserves.														
Nagpur ...	..	...	6	...	...	6	6	6	18	...	1	6	19	...
Bhandara ...	...	1	27	22	1	51	51	51	106	..	2	51	108	...
Chanda ...	..	...	62	2	...	64	64	53	86	11	20	64	106	...
Wardha ...	...	...	10	2	...	12	12	10	14	2	10	12	24	...
Balaghat ...	...	..	13	...	1	14	14	13	25	1	4	14	29	...
Jubbulpore ...	...	..	14	...	3	17	17	17	28	...	13	17	41	...
Saugor ...	..	3	4	1	2	10	10	4	5	5	12	9	17	1 offender absconded.
Damoh ...	...	1	42	6	5	54	54	47	89	7	13	54	102	...
Seoni ...	...	...	32	...	2	34	34	34	47	..	3	34	50	...
Mandla ...	...	1	326	12	...	339	339	318	351	21	40	339	391	...
Betul ...	...	...	12	1	2	15	15	15	43	...	..	15	43	...
Chhindwara ...	...	..	9	...	...	9	9	9	8	..	4	9	12	...
Hoshangabad ...	...	...	37	8	...	45	45	39	69	6	20	45	89	...
Narsinghpur ...	...	...	1	...	...	1	1	1	2	..	..	1	2	...
Nimar ...	...	...	37	4	...	41	41	38	55	3	9	41	64	...
Raipur ...	..	...	20	...	3	23	23	23	38	..	..	23	38	...
Sambalpur ...	...	..	20	9	7	36	36	31	45	5	5	36	50	...
Bilaspur ...	..	...	7	...	..	7	7	7	9	..	...	7	9	...
Total ...	..	6	679	67	26	778	778	716	1,038	61	156	777	1,194	1 offender absconded.
Grand Total ...	...	9	692	69	30	800	800	734	1,079	64	163	798	1,242	2

Annual Form No.

FOREST DEPARTMENT,

Summary of Revenue of the different

Budget Heads Receipts.	Direction Division.	Balaghat District.	Betul Division.	Bhandara District.	Bilaspur District.
RECEIPTS.	Rs. a. p.	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forest by Government Agency—					
a. Timber ...	.....	99 9 10	81 0 5	.....	.....
b. Firewood and Charcoal ...	.....	119 0 10	.....	.....	.....
c. Bambus ...	.....	283 5 3	.....	300 0 0	.....
d. Sandal-wood ...	.....	.....	.....	.....	.....
e. Grass and other Minor Produce..	.....	182 13 6	736 14 0	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers— ...	.....	15,461 13 7	.....	.....	.....
a. Timber ...	.....	1,547 3 6	5,293 12 0	1,388 15 2	6,420 0 6
b. Firewood and Charcoal ...	0 6 0	3,529 7 11	4,610 14 0	13,437 7 7	1,503 1 4
c. Bambus ...	61 2 0	1,790 11 0	3,616 12 7	1,659 4 9	2,106 14 3
d. Grazing and Fodder Grass ...	39 13 6	10,776 1 6	24,001 13 6	21,279 15 6	3,502 15 11
e. Other Minor Produce ...	0 4 0	2,461 6 3	6,123 7 0	586 7 6	2,086 8 6
III.—Confiscated drift and waif wood ..	0 8 0	103 10 8	9 0 0	561 14 9	.....
IV.—Revenue from forests not managed by Government—					
a. Duty on Foreign Timber and other Forest Produce ..	.....	.....	.....	.....	.....
b. Revenue from Shared and Private Forests ..	.....	.....	.....	4 610 0 0	3,850 0 0
V.—Miscellaneous:—					
a. Fines and Forfeitures ..	.....	131 5 3	.....	1,034 6 9	12 5 0
b. Refunds ...	4 11 3	.....	188 0 0	.....	48 13 11
c. Other Sources ...	1,665 13 7	.....	1,969 10 6	1 4 6	685 11 3
Total Receipts ...	1,772 10 4	36,486 9 1	46,631 4 0	44,859 12 6	20,276 6 8
BUDGET HEADS.					
A.—CONSERVANCY AND WORKS.					
I.—Timber and other produce removed from the forests by Government Agency:—					
a. Timber ...	.....	118 7 6	1 8 0	.....	.....
b. Firewood and Charcoal ..	.....	.....	.....	.....	.....
c. Bambus ...	.....	278 5 8	.....	.....	.....
d. Sandal-wood ...	.....	.....	.....	.....	.....
e. Grass and other Minor Produce..	59 9 8	77 15 1	293 7 9	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers ..	.....	7,625 9 6	7,230 6 10	6,794 14 5	3,054 0 5
III.—Confiscated drift and waif wood ...	.....	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government:—					
a. Duty on foreign timber and other forest produce ..	.....	.....	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant.—					
a. Purchase of cattle, ...	.....	.....	.....	.....	.....
b. Feed and keep of cattle ..	670 10 2	.....	.....	.....	.....
c. Stores, tools and plant ...	11 9 0	.....	8 5 0	30 0 0	.....

53.—[*Prescribed.*]

CENTRAL PROVINCES.

Divisions, for the year 1881-82.

Chanda Division.	Chhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore District.	Mandla Division.	Mandla. District.
Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p	Rs. a. p.
2,68,330 10 8	.....	.....	2,698 4 6	.....	21,100 14 1	.....
4 2 0	.....	.....	59 14 0	.....	405 6 3	.....
485 4 6	.....	.....	55 5 3	.....	1,033 4 10	.....
.....	.....	.....	.....	.....	.....	.....
590 15 4	.....	.....	28 2 0	.....	312 0 9	1,364 8 0
.....	.....	4,111 11 0	4,490 4 0	.....	.....	9,996 4 1
12,305 11 0	4,603 2 5	6,650 2 7	19,451 3 5	1,677 5 9	19 5 10	1,929 15 4
11,897 11 8	2,549 12 4	4,721 5 0	4,096 9 11	3,373 3 8	14 1 7	1,602 9 10
17,072 14 11	2,519 13 9	1,190 2 5	9,788 12 0	1,585 13 0	212 11 9	4,281 12 9
42,539 13 3	16,772 6 2	29,500 15 1	26,018 15 0	10,295 7 4	1,757 9 9	57,243 2 8
23,254 13 6	2,722 2 7	19,038 12 11	6,658 5 1	1,604 11 2	176 7 3	6,255 6 3
66 3 8	172 9 6	7 1 0	842 4 6	80 7 3	1 2 0	660 11 8
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	19 11 9	78 11 6	113 5 10	14 9 6	.....	.....
271 12 6	.....	.....	24 2 10	39 13 0	159 13 4	.....
785 6 1	.....	372 0 11	2,777 2 4	115 1 5	144 10 4	.....
3,77,555 7 1	29,359 10 6	65,670 14 5	77,102 10 8	18,786 8 1	25,337 7 9	83,334 6 7
1,03,476 9 9	.....	.....	179 11 11	.....	10,876 3 2	.....
.....	.....	.....	.....	.....	155 6 1	.....
242 2 9	.....	.....	4 8 0	.....	440 4 2	.....
.....	.....	.....	.....	.....	.....	.....
124 14 4	.....	.....	13 7 8	.....	363 0 8	438 3 4
13,500 11 6	7,742 9 8	11,989 9 6	12,809 10 4	4,403 15 10	.....	13,934 5 11
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
2,461 11 7	.....	.....	563 8 3	.....	1,983 15 10	.....
637 8 0	42 3 6	.....	149 9 0	.....	292 13 0	.....

Budget Heads Receipts.	Nagpur Division.	Narsinghpur District.	Nimar Division.	Raipur District.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forest by Government Agency:—				
a. Timber ..	.....	.....	64 15 0	.....
b. Firewood and Charcoal ...	.....	.....	1,606 15 8	.....
c. Bambus ...	.....	.....	106 10 0	.....
d. Sandal-wood ..	.....	.....	.....	.....
e. Grass and other Minor Produce..	.....	.....	652 8 6	.....
II.—Timber and other produce removed from the forest by consumers or purchasers:—				
a. Timber ...	.. ...	.. ...	9,934 15 8	11,028 6 9
b. Firewood and Charcoal ...	4,555 11 2	4,852 8 5	7,100 3 6	2,518 12 2
c. Bambus ..	4,018 1 6	2,304 8 0	2,846 14 0	12,338 13 0
d. Grazing and Fodder Grass ...	895 0 0	1,472 7 6	8,286 4 7	618 5 6
e. Other Minor Produce ..	15,639 10 3	4,986 12 9	27,995 12 10	17,079 1 6
III.—Confiscated drift and waif wood ...	2,293 10 5	1,084 1 3	2,010 1 7	12,707 10 10
IV.—Revenue from forests not managed by Government ...	1,137 10 3	.....	271 12 6	100 14 9
a. Duty on Foreign Timber and other Forest Produce ...	.....	.....	3 6 0	.....
b. Revenue from Shared and Private Forests ...	.....	.....	.....	.....
V.—Miscellaneous:—				
a. Fines and Forfeitures ..	4 0 0	199 11 9	367 3 7	.....
b. Refunds ...	.....	.....	36 2 5	...
c. Other Sources ...	167 14 0	.....	2,718 2 1	1,440 8 0
Total Receipts ...	28,711 9 7	14,900 1 8	63,996 15 11	57,832 8 6
BUDGET HEADS.				
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government Agency:—				
a. Timber ...	.....	.....	29 2 0	.....
b. Firewood and Charcoal ...	.....	.....	669 11 7	.....
c. Bambus ...	.....	.....	.....	.....
p. Sandal-wood ...	.....	.....	.....	.....
e. Grass and other Minor Produce..	.....	.....	136 11 10	.....
II.—Timber and other produce removed from the forests by consumers or purchasers ...	7,614 13 11	3,233 0 4	13,735 13 5	7,142 6 5
III.—Confiscated drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government:—				
a. Duty on foreign timber and other forest produce ...	.....	.....	.....	.....
b. Revenue from shared and Private forests ...	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	... ..	... ..	251 7 0	.....
VI.—Livestock, stores, tools and plant:—				
a. Purchase of cattle ...	.....	.....	7 2 0	... ..
b. Feed and keep of cattle ...	... ..	.....	389 15 11	70 8 9
c. Stores, tools and plant ...	73 10 0	.. ...	591 1 3	.....

53.—[*Prescribed*]—Contd.

Sambalpur District.	Saugor Division.	Seoni Division.	Wardha District.	Jubbulpore Division up to August 1881.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	1,140 8 5	1,375 7 2	1,886 5 9	342 4 9	2,97,120 0 7
.....	.....	35 7 9	291 14 10	.....	2,522 13 4
.....	13 8 0	1,601 14 3	374 4 5	45 15 8	4,299 8 2
.....	.....	.....	.....	.....	.....
.....	270 0 0	103 15 0	2,041 14 11	.....	6,283 12 0
6,025 2 6	742 0 6	10,244 6 0	.....	.....	72,035 0 1
2,058 6 6	5,902 1 4	5,820 2 4	1,745 7 9	.....	95,840 2 8
.....	7,823 0 9	3,671 1 11	5,293 13 0	.....	89,692 15 0
.....	2,428 3 8	13,643 12 0	4 11 0	14 0 0	73,249 9 5
496 15 0	37,279 13 6	36,339 7 10	16,042 1 10	34 5 0	3,99,623 1 8
9 6 0	7,467 15 11	3,824 6 0	680 1 0	261 6 2	1,01,307 7 2
.....	134 4 0	226 1 11	351 14 1	.....	4,728 2 6
.....	.....	.....	.....	.....	3 6 0
.....	.....	.....	.....	.....	8,460 0 0
1,087 5 3	.....	10 0 0	165 10 3	.....	3,238 6 5
.....	32 1 0	.....	0 0 4	.....	805 6 7
.....	592 8 5	287 4 8	6 10 0	.....	13,674 12 1
9,677 3 3	63,826 1 6	77,183 6 10	23,884 13 2	697 15 7	11,72,884 7 8
.....	155 14 1	.....	262 9 11	1 0 0	1,15,101 2 4
.....	.....	.....	199 10 0	.....	1,024 11 8
.....	0 4 0	393 0 6	2 0 0	13 3 0	1,373 12 1
.....	.....	.....	.....	.....	.....
.....	66 2 6	121 10 9	1,196 13 0	.....	2,892 0 7
3,868 4 10	13,556 12 8	9,719 3 2	5,138 11 11	.....	1,53,104 0 7
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	251 7 0
.....	.....	.....	994 0 0	.....	1,001 2 0
.....	.....	187 3 0	131 8 3	.....	6,459 1 9
.....	16 12 0	78 12 0	235 11 6	.....	2,167 14 3

BUDGET HEADS. A—CONSERVANCY AND WORKS.	Direction Division.	Balaghat District.	Betul Division.	Bhandara District.
BUDGET HEADS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS.				
VII.—Communications and Buildings:—				
a. Roads and Bridges ...	.....	.....	3 0 0	.....
b. Buildings ...	.....	.....	.....	.....
c. Other Works ...	.....	.....	.....	.....
VIII.—Demarcation, improvement and extension of forests:—				
a. Demarcation ...	.....	.....	.....	.....
b. Compensationfor land and rights. .	.....	.....	.....	.....
c. Surveys and Working Plans ...	.....	.....	.....	.....
d. Plantations ...	24 0 0	8 0 0	.....	.....
e. Protection from fire ...	178 9 4	41 9 9	809 3 10	.....
f. Other Works ...	29 14 6	.....	53 11 0	.....
IX.—Miscellaneous:—				
a. Refunds ...	.....	.....	.....	.....
b. Law charges ..	.....	.....	.....	.....
c. Other Charges ...	3,125 14 2	.....	.....	.....
Total A.—Conservancy and Works ...	4,100 2 10	8,149 15 6	8,399 10 5	6,824 14 5
BUDGET HEADS.				
B.—ESTABLISHMENTS.				
I.—Salaries:-				
a. Conservators ...	16,800 0 0	.....	.....	.....
b. Superior Officers ...	7,705 10 4	.....	5,273 5 4	5,400 0 0
c. Subordinate Forest and Depot Establishments ...	1,575 3 3	792 0 0	2,345 5 7	.....
d. Office Establishments ...	4,243 5 0	.....	572 10 0	.....
e. Deputation and Special Allowances ...	.....	.....	.....	.....
II.—Travelling Allowances:—				
a. Conservators ...	1,206 6 0	.....	.....	.....
b. Superior Officers ...	1,050 15 0	.....	1,095 0 0	300 2 0
c. Subordinate Forests and Depot Establishments ...	127 12 5	.....	.....	.....
d. Office Establishments ...	206 10 3	.....	32 9 11	.....
III.—Contingencies:—				
a. Stationery ...	52 7 0	.....	12 2 3	.....
b. Carriage of tents and records ...	816 10 3	.....	559 12 0	85 11 6
c. Rents, rates and taxes ...	540 0 0	.....	300 0 0	.....
d. Pay of Police Guards ...	.....	.....	.....	.....
e. Official Postage ...	281 3 6	75 6 6	113 8 0	169 4 0
f. Sundries ...	895 0 8	.....	159 2 6	.....
Total B.—Establishments ...	35,501 3 8	867 6 6	10,463 7 7	5,955 1 6
Grand Total of Expenditure ...	39,601 6 6	9,017 6 0	18,863 2 0	12,779 15 11

53.—[*Prescribed.*]—Contd.

Bilaspur District.	Chanda Division.	Chhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore. District.	Mandla. Division.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	16 1 6	.....	.....	169 9 0	.....	558 3 10
.....	293 8 1	41 8 0	1 9 0	79 2 3	.....	571 9 11
.....	13 0 0	.....	.....	.....	.....	1,157 5 6
.....	293 9 7	.....	.....	.....	.....	43 4 0
.....	.....	.....	.....	.....	.....	.....
.....	367 1 6	.....	.....	.....	.....	337 1 6
.....	.....	.....	.....	.....	.....	.....
.....	3,283 14 7	.....	.....	1,550 10 1	.....	1,803 3 0
.....	592 6 10	.....	121 7 8	61 1 0	.....	403 7 9
.....	114 12 3	.....	.....	33 8 0	13 4 0	.....
.....	1 8 0	.....	.....	.....	.....	355 9 4
.....	.....	.....	.....	56 14 0	.....	88 14 0
3,054 0 5	1,25,428 8 3	7,826 5 2	12,112 10 2	15,671 3 6	4,417 3 10	19,430 5 9
.....	.....	.....	.....	.....	.....	.....
.....	10,450 0 0	.....	.....	10,934 8 0	.....	9,885 7 9
.....	5,634 3 4	.....	645 13 11	3,164 9 2	672 0 0	5,207 15 10
.....	1,720 2 0	.....	.....	615 8 1	.....	860 0 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	2,192 0 0	.....	.....	853 6 0	.....	1,136 0 0
.....	.....	.....	33 0 0	8 0 0	2 2 3	317 14 9
.....	4 6 7	.....	.....	11 13 2	.....	114 13 0
.....	9 10 0	.....	.....	9 1 6	.....	68 12 11
.....	303 9 8	.....	.....	334 9 9	.....	589 0 2
.....	30 0 0	.....	.....	.....	.....	320 0 0
.....	.....	.....	.....	.....	.....	.....
.....	289 12 0	51 6 6	12 1 0	233 9 0	11 10 0	110 4 6
.....	238 3 6	.....	.....	200 0 1	.....	370 3 8
.....	20,871 15 1	51 6 6	690 14 11	16,365 0 9	685 12 3	18,080 8 7
3,054 0 5	1,46,300 7 4	7,877 11 8	12,803 9 1	32,036 4 3	5,103 0 1	38,410 14 4

BUDGET HEADS. A—CONSERVANCY AND WORKS.	Mandla District.	Nagpur Division.	Narsinghpur District.	Nimar Division.
BUDGET HEADS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—CONSERVANCY AND WORKS.				
VII.—Communications and Buildings:—				
a. Road and Bridges ...	.....	.....	.....	101 8 6
b. Buildings ...	.....	.....	.....	1,260 11 8
c. Other Works ...	.....	.....	.....	686 5 11
VIII.—Demarcation, improvement and extension of forests:—				
a. Demarcation ..	.....	.....	.....	161 3 10
b. Compensation for Land and Rights.	.....	.....	.....	.....
c. Surveys and Working Plans ...	.....	.....	.....	250 14 10
d. Plantations ...	.....	.....	.....	4,137 1 9
e. Protection from fire ...	.....	.....	.....	2,581 2 8
f. Other Works ...	.....	.....	.....	4 9 1
IX.—Miscellaneous:—				
a. Refunds ...	191 0 6	.....	.....	.....
b. Law charges ...	.....	2 4 0	.....	28 8 3
c. Other Charges ...	.....	.....	.....	1,007 8 3
Total A.—Conservancy and Works ...	14,563 9 9	7,690 11 11	3,233 0 4	26,030 11 9
BUDGET HEADS.				
B.—ESTABLISHMENTS.				
I.—Salaries:—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers .	.....	5,471 0 7	.....	12,128 10 0
c. Subordinate Forest and Depot Establishments ...	682 0 0	768 15 6	81 0 0	6,273 14 7
d. Office Establishments ..	.....	112 7 4	.....	901 7 2
e. Deputation and Special Allowances ...	.....	.....	.....	.....
II.—Travelling Allowances:—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers ...	.....	575 11 0	.....	2,730 13 0
c. Subordinate Forests and Depot Establishments ...	.....	.....	.....	87 6 0
d. Office Establishments ...	.....	16 4 0	.....	65 5 5
III.—Contingencies:—				
a. Stationery ...	.....	.....	.....	68 9 4
b. Carriages of tents and records ...	.....	169 2 1	.....	701 3 3
c. Rents, rates and taxes ...	.....	.....	.....	.....
d. Pay of Police Guards ...	.....	.....	.....	.....
e. Official Postage ...	57 8 0	148 15 6	.....	228 14 0
f. Sundries ...	.....	99 9 11	0 5 0	189 8 6
Total B.—Establishments ...	739 8 0	7,362 1 11	81 5 0	23,375 11 3
Grand Total of Expenditure ...	15,303 1 9	15,052 13 10	3,314 5 4	49,406 7 0

Dated Calcutta:
The 29th June 1882.

53.—[*Prescribed*]—Contd.

Raipur District.	Sambalpur District.	Saugor Division.	Seoni Division.	Wardha District.	Jubbulpore Division up to August 1881.	Total
Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	.....	.....	848 6 10
.....	.....	53 3 0	46 6 0	49 1 0	10 3 6	2,408 14 5
.....	.....	.....	.....	32 10 3	.....	1,889 5 8
.....	.....	200 2 9	49 1 0	123 2 6	.....	870 7 8
.....	.....	.....	.....	.....	.....	.....
.....	.....	11 0 0	.....	.....	.....	966 1 10
.....	.....	.....	2 1 4	491 4 1	.....	4,662 7 2
.....	.....	550 7 4	1,842 1 2	425 5 9	241 1 1	13,307 4 7
.....	.....	2,074 1 0	421 2 4	69 6 3	51 5 10	3,882 9 3
250 7 11	.....	40 0 0	0 0 11	30 11 6	.....	673 13 1
.....	.....	0 10 0	2 0 0	.....	.....	390 7 7
.....	.....	13 11 3	124 8 6	50 6 0	.....	4,467 12 2
7,463 7 1	3,868 4 10	16,741 0 7	12,987 2 8	9,432 15 11	316 13 5	3,17,742 14 6
.....	.....	.....	.....	.....	.....	16,800 0 0
2,100 0 0	.....	6,650 0 0	7,962 8 0	4,200 0 0	.....	88,161 2 0
672 0 0	.....	1,917 4 4	4,798 7 2	1,417 6 1	530 8 0	37,178 10 9
12 13 11	.....	284 0 0	619 0 0	.....	105 0 0	10,046 5 6
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	1,206 6 0
320 8 0	.....	1,297 8 0	521 0 0	1,021 7 0	.....	12,994 6 0
.....	.....	.....	98 4 0	.....	.....	674 7 5
.....	.....	20 12 3	85 3 2	.....	15 6 8	573 4 5
.....	.....	4 3 0	93 13 2	18 10 5	2 11 0	280 0 7
62 4 0	.....	286 10 8	384 14 0	253 12 0	39 10 10	4,586 14 2
.....	.....	240 0 0	300 0 0	.....	.....	1,730 0 0
.....	.....	.....	.....	.....	.....	.....
6 4 6	.....	369 12 6	148 11 0	17 6 6	15 14 6	2,341 7 6
25 11 10	.....	203 9 7	226 5 6	44 10 6	44 4 4	2,696 11 7
3,099 10 3	.....	11,278 12 4	15,178 2 0	6,013 4 6	753 7 4	1,79,269 11 11
10,563 1 4	3,868 4 10	28,014 12 11	28,165 4 8	16,406 4 5	1,070 4 9	4,97,012 10 5

(Signed) A. L. HOME,

Asst. Comptroller General (Forests).

Annual Form No. 54—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account Current for the year 1881-82.

Dr.

		Rs.	a.	p.	Rs.	a.	p.
To Cash balance on 1st April 1881 ...		...	...	...	1,067	6	9
„ Revenue as per Annual Summary (Form No. 53)		...	...	..	11,72,884	7	8
„ Service Funds		...	..	..			
Military Fund Bengal ..		243	0	0			
Do. Madras ...		438	15	0			
Military Orphan Fund, Bengal ...		210	0	0			
Uncovenanted Service Family Pension Fund, Bengal ..		3,061	7	0			
General Family Pension Fund ..		630	0	0	4,583	6	0
To Deposits		...	...	...	385	10	9
„ Forest Cash Remittances (Local) ...		...	...	...			
Remittances from State treasuries ..		4,59,079	12	1			
Inter-Divisional Transfers ...		2,78,362	3	3	7,37,441	15	4
„ Advances Recoverable ...		...	...	...	2,82,638	15	1
„ Suspense		...	...	...	493	13	6
„ Account Current other Governments—							
Remittances from Government of Bombay.		450	0	0			
Do. North-Western Provinces and Oudh.		625	0	0	1,075	0	0
„ Inter-Departmental Transfers ...		...	..	..			
Public Works Department State Railways—							
Nagpur and Chhattisgarh State Railway. .		6,346	3	9			
Do. Holkar State Railway ...		988	5	8			
Do. Wardha Coal State Railway ...		500	0	0			
Other Branches ..		30	10	0			
Military Department, Bengal ...		12	0	0			
Do. Bombay ...		206	2	1			
Civil Departments							
Jails ...	965 15 8						
Mathematical Instrument Department ...	621 15 0						
Education ...	8 8 0	1,596	6	8	9,679	12	2
		Total ...			22,10,253	7	3

Cr.

		Rs.	a.	p.	Rs.	a.	p.
By Expenditure as per Annual Summary (Form No. 53)		...	.	...	4,97,012	10	5
„ Deposits		...	.	..	206	4	5
Forest Cash Remittances (Local)—							
Remittance to treasuries ..		8,88,326	4	2	...	.	..
Inter-Divisional transfers ...		2,78,484	3	7	11,66,810	7	9
Advances Recoverable		...	.	..	2,68,056	12	5
Suspense		...	.	.	3	7	4
Account current other Governments—							
Remittance to Government of Madras ..		4,682	10	9	...	...	..
Do. Bombay ...		3,163	8	0	7,846	2	9
Inter-Departmental Transfers— ..		...		.			
Public Works Department State Railway ..		...		...			
Do. Wardha Coal State Railway ..		6,298	3	2			
Do. H. S. and N. State Railway ...		1,596	15	8			
Do. Nagpur and Chhattisgarh State Railway.		2,55,885	0	0			
Other Branches		1,085	14	5			
Military Department, Bengal ...		96	5	3			
Civil departments		...	..	...			
Jails ...	3,168 9 8	...	..	..			
Mathematical Instrument Dept.	334 14 0	...	...	..			
Rewards for passing examination	180 0 0	3,685	7	8			
Post Office		36	4	9	2,68,682	2	11
Closing balance		...	.	...	1,635	7	3
		Total ...			22,10,253	7	3

Calcutta:

The 29th June 1882.

A. H. HOME,

Asst. Comptroller General (Forests)

Annual Form No. 55.—[*Prescribed*].

FOREST DEPARTMENT, CENTRAL PROVINCES.

Outstandings and Liabilities on account of Contractors and Disbursers for 1881-82.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities.)	
	Rs.	Rs. a. p.	Rs. a p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction Division ...	...	20,239 1 6	20,239 1 6	211 13 3	20,333 2 5	20,544 15 8	305 14 2	...	
Balaghat District ...	...	509 0 0	509 0 0	130 0 0	429 0 0	559 0 0	50 0 0	...	
Betul Division ...	...	7,786 8 1	7,786 8 1	261 6 7	7,551 15 5	7,813 6 0	26 13 11	...	
Bhandara District ...	...	250 0 0	250 0 0	...	250 0 0	250 0 0	...	...	
Chanda Division ...	...	1,52,979 4 10	1,52,979 4 10	35,363 2 7	1,41,623 12 10	1,76,986 15 5	24,007 10 7	...	
Chhindwara District ...	...	7,886 6 8	7,886 6 8	...	7,886 6 8	7,886 6 8	...	...	
Hoshangabad Division ...	...	6,740 1 6	6,740 1 6	267 0 9	6,579 15 8	6,847 0 5	106 14 11	...	
Jubbulpore District ...	...	4,594 4 0	4,594 4 0	106 12 10	4,489 6 1	4,596 2 11	1 14 11	...	
Mandla Division ...	...	18,283 5 8	18,283 5 8	2,003 10 3	16,860 2 3	18,863 12 6	580 6 10	...	
Mandla District ...	...	995 0 0	995 0 0	995 0 0	...	995 0 0	...	...	
Nagpur Division ...	...	7,602 6 3	7,602 6 3	197 14 5	7,465 5 2	7,663 3 7	80 13 4	20 0 0	
Nimar Do. ...	...	27,809 1 10	27,809 1 10	502 3 1	27,868 0 0	28,370 3 1	561 1 3	...	(a) As per Form No. 54 ...2,68,056-12-5
Raipur District ...	...	171 6 6	171 6 6	.....	200 0 0	200 0 0	28 9 6	...	Do. No. 55. ...2,67,856-12-5
Saugor Division ...	...	4,235 2 11	4,235 2 11	45 5 1	4,258 12 5	4,304 1 6	68 14 7	...	
Seoni do. ...	...	18,850 0 8	18,850 0 8	680 12 7	18,520 13 6	19,201 10 1	351 9 5	...	Difference ...Rs. 200- 0-0
Wardha District ...	...	3,707 12 8	3,707 12 8	595 13 8	3,540 0 0	4,135 13 8	428 1 0	...	Represents amount debited to "Advances Recoverable" in writeback of an erroneous excess credit under that head in July 1880
Total ...	...	2,82,638 15 1	2,82,638 15 1	41,360 15 1	(a) 2,67,856 12 5	3,09,217 11 6	26,598 12 5	20 0 0	

Calcutta:
The 29th June 1882.

A. L. HOME,
Asst. Comptroller General (Forests.)

Annual Form No. 56.—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Revenue received and Outstandings on account of Revenue during 1881-82.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	
Direction ...	Timber and other produce.	.....	1,772 10 4	1,772 10 4	1,772 10 4	.....	
Balaghat District ...	Do. do. ...	.....	36,486 9 1	36,486 9 1	36,486 9 1	.....	
Betul Division ...	Do. do. ...	.....	46,713 9 10	46,713 9 10	46,670 12 0	42 13 10	
Bhandara District ..	Do. do. ...	.....	44,859 12 6	44,859 12 6	44,859 12 6	.....	
Bilaspur District ...	Do. do. ...	.....	20,276 6 8	20,276 6 8	20,276 6 8	.....	
Chanda Division ..	Do. do. ...	8,695 0 11	3,80,768 8 3	3,89,463 9 2	3,78,324 7 1	11,139 2 1	
Chhindwara District ...	Do. do. ...	.....	29,359 10 6	29,359 10 6	29,359 10 6	.....	
Damoh District ...	Do. do. ...	.....	66,336 3 4	66,336 3 4	66,336 3 4	.....	(*a*) Realizations as per Form No. 53. Rs. 11,72,884 7 8
Hoshangabad Division ...	Do. do. ...	.....	77,102 10 8	77,102 10 8	77,102 10 8	.....	Written off under Govt. orders ... 3,453 6 6
Jubbulpore District ...	Do. do. ...	.....	18,786 8 1	18,786 8 1	18,786 8 1	.....	Reduction in the balance allowed under explanation ... 39 8 0
Mandla Division ...	Do. do. ...	6,792 7 9	22,980 1 4	29,772 9 1	27,191 11 0	2,580 14 1	
Mandla District ...	Do. do. ...	.....	83,334 6 7	83,334 6 7	83,334 6 7	.....	
Nagpur Division ...	Do. do. ...	553 0 0	28,706 13 7	29,259 13 7	28,711 9 7	548 4 0	
Narsinghpur District ..	Do. do. ...	.....	14,900 1 8	14,900 1 8	14,900 1 8	.....	
Nimar District ...	Do. do. ...	.....	63,996 15 11	63,996 15 11	63,996 15 11	.....	
Raipur District ...	Do. do. ...	.....	57,832 8 6	57,832 8 6	57,832 8 6	.....	Total of Col. 4 .. Rs. 11,76,377 6 2
Sambalpur District ...	Do. do. ...	.....	9,677 3 3	9,677 3 3	9,677 3 3	.....	
Saugor Division ..	Do. do. ...	.....	63,826 1 6	63,826 1 6	63,826 1 6	.....	
Seoni Division ..	Do. do. ..	.....	77,183 7 1	77,183 7 1	77,183 6 10	0 0 3	
Wardha District ...	Do. do. ...	2 5 3	28,884 13 2	28,887 2 5	28,884 13 2	2 5 3	
Jubbulpore Division ...	Do. do. ..	170 10 1	692 3 10	862 13 11	862 13 11	.....	
	Total ...	16,213 8 0	11,74,477 5 8	11,90,690 13 8	(*a*) 11,76,377 6 2	14,313 7 6	From Public Depts. Rs. 608 2 3 „ Private parties „ 13,705 5 3 Total Rs. 14,313 7 6

Calcutta:
The 29th June 1882.

A. L. HOME,
Asst. Comptroller General (Forests).

Form No 57

FOREST DEPARTMENT, CENTRAL PROVINCES.

Financial results of the year 1881-82.

Divisions.	Timber and other produce removed from the forests by Government agency.		Other Revenue.		Formation, improvement and protection of forest.	Total.		Remarks
	Receipts.	Charges.	Receipts.	Charges	Charges.	Receipts.	Charges	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	
Direction	Nil.	85	1,773	1,598	2,938	1,773	4,621	
Mandla Division	23,240	16,525	2,795	1,000	25,456	26,035	42,981	
Betul Division	81	2	10,568	3,124	5,287	10,649	8,413	
Hoshangabad Division	2,729	498	23,059	6,402	7,538	25,788	14,438	
Nimar Division	2,431	1,680	20,368	9,749	19,098	22,799	30,527	
Chanda Division	2,69,411	1,12,613	24,055	5,996	11,136	2,93,466	1,29,745	
Seoni Division	3,081	1,264	23,661	7,026	7,360	26,742	15,650	
Saugor Division	1,424	817	7,003	3,128	5,210	8,427	9,155	
Total ..	3,02,397	1,33,484	1,13,282	38,023	84,023	4,15,679	2,55,530	
Nagpur District	Nil.	Nil.	28,712	11,771	4,281	28,712	16,052	
Bhandara District	300	Nil.	44,560	10,202	3,578	44,860	13,780	
Chanda District	Nil.	Nil.	84,090	15,755	4,802	84,090	20,557	
Wardha District	4,594	3,572	24,291	8,905	4,929	28,885	17,406	
Balaghat District	685	525	35,802	8,434	1,059	36,487	10,018	
Jubbulpore District	Nil.	Nil.	18,786	5,066	650	18,786	5,716	
Saugor District	Nil.	Nil.	55,399	17,161	4,700	55,399	21,861	
Damoh District	Nil.	Nil.	65,671	12,736	1,067	65,671	13,803	
Seoni District	36	1	50,405	11,554	3,960	50,441	15,515	
Mandla District	1,364	438	81,970	14,525	1,339	83,334	16,302	
Betul District	737	293	35,245	9,666	3,491	35,982	13,450	
Chhindwara District	Nil	Nil.	29,360	8,226	651	29,360	8,877	
Hoshangabad District	63	Nil.	51,252	16,238	5,362	51,315	21,600	
Narsinghpur District	Nil.	Nil.	14,900	3,538	386	14,900	3,924	
Nimar District	Nil.	Nil.	41,198	14,100	8,780	41,198	22,880	
Raipur District	Nil.	Nil.	57,832	7,742	3,902	57,832	11,644	
Sambalpur District	Nil.	Nil.	9,677	4,193	325	9,677	4,518	
Bilaspur District	Nil.	Nil.	20,276	3,317	263	20,276	3,580	
Total ...	7,779	4,829	7,49,426	1,83,129	53,525	7,57,205	2,41,483	
Grand Total ...	3,10,176	1,38,313	8,62,708	2,21,152	1,37,548	11,72,884	4,97,013	

Annual Form No. 58.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Trees felled by Government agency during the Year 1881-82.

Divisions.	Trees felled.		Remarks.
	Description.	Number.	
Nimar	Kher ...	3	
	Dhowra ...	6	
	Sajar ...	2	
	Kalam ..	1	
	Temru ...	1	
	Teak ...	50	
	Miscellaneous ...	20	
Chanda	Teak ..	9	
	Saj ...	460	
	Total ...	552	

FORM No. 59.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Outturn of Timber and other produce cut and collected by Government agency during the year 1881-82.

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
Mandla Division. ...	Fallen wood ...	Sal logs squared ..	20	175	
	Do. ...	Sal logs round ...	6	30	
	Do. ...	Sal sleepers 10'× 10'×5"...	4,447	15,432	
	Do. ...	„ 6×8" ×5" ...	1,221	2,098	
	Do. ...	Sal scantlings ...	808	207	
	Do. ...	Sal furdahs ...	674	...	
	Recovered form River ...	Sal pieces ...	23	...	
	Fallen wood ...	Teak logs ...	64	76	
	From copsing ...	Teak kurroes ...	246	...	
	Do. ...	Teak bulloes ..	1,693	...	
	Do. ...	Teak mulgas ...	24	...	
	Fallen wood ...	Khamir slrepers 6'× 8"×4½"	31	46	
	From felling ...	Bulloes ...	732	...	
	Recoverd from River ...	Sutkutta pieces ...	13	...	
	Do. ...	Beeja piece ...	1	...	
	Fallen wood ...	Boats ...	11	...	
	Recovered from River ...	Teak pieces ...	4	...	
		Total timber ...	10,018	18,064	
	Recovered faom River ...	Firewood pieces ...	397	...	
	By collection ...	Firewood ..	3,050	Maunds.	
	From fellings ...	Bambus ...	89,228	...	
	By collection ..	Hurra ..	941	Maunds.	
	Do. ..	Lac ...	12	Maunds.	
	Do. ...	Teekur ...	95	Maunds.	
	Do. ...	Baichandi ...	1	Maund.	
	Do. ...	Stag horns ...	18	Maunds.	
	Do. ...	Skins ...	8	...	
	By purchase ...	Molain ropes ...	61	...	
		Total ...	93,811	...	
Betul Division. ...	By collection .	Teak logs ..	4	...	
Hoshangabad Division ...	By collection ...	Hurra ...	629	Maunds.	
	From copsing ...	Teak log ...	1	...	
	Do. ...	Teak stumps ...	50,872	...	
	Do. ...	Teak choolias ...	1,004	...	
	Do. ...	Teak khakers ...	2,550	...	
	Do. ...	Teak saktics ...	7,957	...	
	Do. ...	Halu log ...	1	...	
	Do. ...	Khair and tinus poles ...	28	...	
		Total timber ...	62,413	...	
Hoshangabad Division ...	By collection ...	Firewood ...	114	Cart load.	
	From cuttings ...	Bambus ...	225	...	
	By collection ...	Hurra ...	36	Maunds.	
	Do. ...	Mohwa flowers ...	5	Maunds.	
	Do. ...	Gulli ...	7	Maunds.	
	Do. ...	Bai-burung ...	3	Maunds.	
		Total ...	390	...	

FORM No. 59.—(*Continued.*)

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
Nimar Division ...	By collection from previous fellings.	Teak charputs and chulias...	36	...	
	Do. ...	Teak poles ...	125	...	
	Do. ...	Teak pieces ...	4	...	
	Do. ...	Anjun sleepers ...	16	...	
	Do. ...	Anjun slabs ...	40	...	
	Do. ...	Pieces of other wood ...	13	...	
	Do. ...	Teak boat ...	1	...	
		Total...	235	...	
	From copsing ...	Firewood ...	...	100	
	Do. ...	Firewood ...	50	Cartloads	
	From cutting ...	Bambus ..	3,098	...	
	Do. ...	Grass ...	15,000	Bundles.	
	By collection ...	Char ...	28	Maunds.	
	Do. ...	Lac ...	1	do.	
	From Kirgaon nursery ...	Grain ...	13	do.	
	Do. ...	Jowari ...	26	do.	
	Do. ...	Tilli ...	35	do.	
	Do. ..	Indian corn ...	22	do.	
	Do. ...	Mung ...	9	do.	
	Do. ...	Tur ...	2	do.	
	Do. ...	Wheat ...	2	do.	
	Do. ..	Brinjals and oranges ...	1	do.	
	Do. ...	Jowari straw ...	300	Bundles.	
		Total...	18,587	100	
Chanda Division ...	From Govt. forests.	Teak logs ...	324	6,016	
	„ private forests on purchase.	Do. ...	86	1,600	
	„ Govt. forests	Teak sleepers ...	2,685	4,443	
	„ private forests on purchase.	Do. ...	3,919	6,627	
	Out-turn from Saw mills ...	Teak scantlings ...	2,753	2,511	
	By conversion ...	Teak furdahs ...	5,428	7,050	
	Out-turn from Saw mills ...	Teak planks ...	730	545	
	Do. ...	Teak khakurs ...	10	...	
	From Govt. forests.	Teak mundas ...	3	...	
	Do. ...	Saj logs ...	4,455	84,979	
	From private forests on purchase.	Do. ...	3,082	28,441	
	Out-turn from Saw mills ...	Saj sleepers ...	20,409	33,957	
	From private forests on purchase.	Do. ...	82	136	
	Out-turn from saw mills ...	Saj planks ...	3,120	1,698	
	From Govt. forests.	Saj mials ...	25	141	
	From fellings ...	Dhaora logs ...	210	330	
	Do. ...	Rohun log ...	1	11	
	Do. ...	Satin wood logs ...	52	172	
	Do. ...	Gurrari logs ...	100	353	
	Do. ...	Do. props ...	1,767	4,378	
	Do. ...	Saj khakers ...	53	...	
	By collection ...	Sheeshum wood pieces ...	2	...	

FORM No. 59.—(*Continued.*)

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
	By collection ...	Behera wood pieces ...	9	61	
	Do. ...	Cot wood " ...	5	...	
	From fellings ...	Askoors ...	1,743	...	
	Do. ...	Dhuras ...	62	...	
		Total Timber ...	51,115	1,83,449	
	By collection ...	Firewood ...	16	Maunds.	
	From cuttings ...	Bambus ...	10,827	...	
	Do. ...	Grass heaps ...	2	...	
	By collection ...	Hurra ...	70	Maunds.	
	Do. ..	Lac ...	13	do.	
	Do. ...	Horns ...	413	...	
	By cultivation ...	Sugarcane ...	275	...	
		Total ...	11,616	...	
Seoni Division ...	From copsing ...	Teak poles ...	762	...	
	Do. ...	Do. pieces ...	97	...	
	Do. ...	Refused teak pieces ...	78	Cartloa d	
	Do. ...	Bija pieces ...	10	...	
	Do. ...	Saj " ...	38	...	
	Do. ...	Tinsa and tendu pieces ...	29	...	
		Total Timber ...	1,014	...	
	From fallen wood.	Fuel ...	133	Cartloads	
	Do. ...	Do. ...	143	Hd. loads	
	From cuttings ...	Bambus ...	57,178	...	
	Do. ...	Do. ...	21	Cartloads	
	Do. ...	Grass pulas ...	1,03,000	...	
	Do. ...	Do. ...	1	Cartload	
		Total ...	1,60,476	...	
Saugor Division ...	From fallen wood.	Teak logs ...	28	22	
	From copsing ...	Do. poles ...	5,714	...	
	Do. ...	Saj log ...	1	...	
	Do. ...	Do. poles ...	1,577	...	
		Total ...	7,320	22	
	By collection ...	Lac ...	22	Maunds.	
Wardha Division ...	From thinnings...	Teak poles ...	6,209	...	
	From Chanda Dn.	Do. scantlings ...	102	...	
	From thinnings...	Do. bits ...	40	...	
	Do. ...	Do. beams ...	2	...	
	From Chanda Dn.	Askoors ...	998	...	
	Do. ...	Dhuras ...	299	...	
	From thinnings...	Poles of other wood ...	292	...	
	Do. ...	Ber khunas ...	2,507	...	
		Churkas ...	2	...	
		Cot ...	1	...	
	Do. ...	Rafters ...	292	...	
		Total Timber ...	10,744	...	
	From thinnings...	Firewood ...	1,722	Maunds.	
		Charcoal ...	28	Maunds.	
	From Chanda Dn.	Bambus ...	5,930	...	

FORM No. 59.—(*Continued.*)

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
	From fellings ...	Bambus ...	260	...	
	From cuttings ...	Grass pulas ...	568,108	...	
	By collection ...	Mhowa ...	8	Maunds.	
	Do. ..	Char ...	11	do.	
	Do. ..	Lac ...	4	do.	
	Do. ...	Gum ...	28	do.	
	Do. ..	Bhibas ...	2	do.	
	Do. ...	Kosa or silk cocoons ...	35	...	
	Do. ...	Skins ...	2	...	
Wardha Division. ..	By collection ...	Teak leaves ...	213	Bundles.	
	By cultivation ..	Tur ...	4	Maunds.	
		Castor and cotton seed ...	1	do.	
		Total ...	576,356	...	
		Grand Total ...	1,004,750	2,01,635	
		ABSTRACT.			
		Teak logs round ..	507	7,714	
		Sal logs round ...	6	30	
		Sal logs squared ...	20	175	
		Logs other than teak and sal.	7,929	1,14,427	
		Teak scantlings ...	3,101	2,511	
		Sal scantlings ...	808	207	
		Teak sleepers ...	6,604	11,070	
		Sal sleepers ...	5,668	17,530	
		Sleepers other than teak and sal ...	20,538	34,139	
		Teak slabs ...	5,428	7,050	
		Sal slabs ...	674	...	
		Teak planks ...	730	545	
		Planks other than teak and sal ...	3,120	1,698	
		Teak pieces ...	52,713	...	
		Teak pieces cart load ...	78	..	
		Pieces other than teak and sal ..	7,910	4,439	
		Sal pieces ...	23	...	
		Teak poles ..	24,391	...	
		Poles other than teak and sal ...	2,603	...	
		Boats ...	12	...	
		Total Timber ...	1,42,863	2,01,535	
		Firewood ...	...	100	
		Do. ...	4,788	Maunds.	
		Do. ...	143	Hd. loads	
		Do. ...	297	Cartloads	
		Do. pieces ...	397	...	
		Charcoal ...	28	Maunds.	
		Bambus ...	1,66,746	...	
		Bambus ..	21	Cartloads	
		Grass pulas ...	6,86,108	...	
		Do. ..	1	Cartload.	
		Do. ...	2	Heaps.	
		Hurra ...	1,676	Maunds.	
		Mhowa flower and seed ...	20	do.	

FORM No. 59.—(*Continued.*)

Division.	Produce cut and collected.				Remarks.
	How obtained.	Descriptions.	Number or quantity.	Cubic feet.	
		Gums ...	28	Maunds.	
		Lac ..	52	do.	
		Hides ..	10		
		Horns ...	431		
		Fruits ..	39	Maunds.	
		Grain ...	115	do.	
		Cocoons ..	35	...	
		Teak leaves ..	213	Bundles.	
		Miscellaneous produce ...	101	Maunds.	
		Do. ..	630	...	
		Total ...	8,61,887	100	
		Grand Total ...	1,004,750	201,635	

Form No. 61.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Sale of timber and other produce cut and collected by Government Agency during the year 1881 82.

Division.	Depôt or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		SOLD FROM DEPOTS.			
Mandla ...	Gwarighat ..	Teak logs	94	2,441	
		Sal logs	232	9,090	
		Sal logs squared	35	322	
		Sal sleepers 10—10×10 ...	8	74	
		Do. 10—10× 5 ..	3,426	11,865	
		Do. 6× 8× 5 ..	1,153	1,914	
		Do. 6× 8×4} ..	799	1,188	
		Boats	6	...	
		Bambus	10,983	...	
		Sal Furdas	9	...	
		Teak pieces	4	...	
		Sal pieces	24	...	
		Bullies	885	...	
		Firewood pieces	399	...	
		Ropes	71	...	
		Satkutta pieces	13	...	
		Sal scantlings	95	78	
		Beeja pieces	1	...	
Chanda ...	Warora ..	Teak logs round	6	133	
		Teak furdas ...	308	1,429	
		Teak scantlings	1,922	2,808	
		Teak planks	4	3	
		Dhooras	45	...	
		Ascoors	680	...	
		Bhera wood pieces ...	18	...	
		Saj planks	450	274	
		Yen khakurs	29	...	
		Garrari props	1,767	4,378	
		Dhaura logs	36	114	
		Yen mials	1	16	
		Bambus	1,040	...	
	Rajamandry ..	Teak logs round	142	1,879	
		Do. squared	19	278	
		Teak scantlings	2,258	1,652	
Saugor ...	Saugor ..	Babul logs	23	215	
		Bambus	382	...	
Wardha ...	Wardha ..	Teak poles	127	...	
		Fuel maunds	798	...	
		Lac Do.	2	...	
		Honey Do.	1	...	
		Gum Do.	20	...	
		Mohwa Do.	8	...	
		Achar Do.	10	...	
		Charcol Do.	7	...	
		Grass poolas	1,14,655	...	
		Bambus	8	...	
		Skin	1	...	

Form No. 61.— (Continued.)

Division.	Depot or locality	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic foot.	
Hoshangabad ...	2nd Class Reserved Forests ...	Charcal cart loads ...	1	...	
		Chironjee head loads ...	3	...	
		Do. maunds ...	1	...	
		Achar poles	19	...	
		Grass bullock loads ...	4	...	
		Buckle head loads ...	1	...	
		Mohwa do. ...	5	...	
		Do. maunds ...	11	...	
		Gulli head loads	2	...	
		Do. oil maunds ...	4	...	
		Teak stumps	18	...	
		Tinus poles	19	...	
		Teak cholias	185	...	
		Teak satkies	316	...	
		Teak poles	17	...	
		Teak patties	86	...	
		Teak logs	18	...	
		Yokes	6	...	
		Saj Girars cartloads ...	1	...	
		Poles	17	...	
		Mohwa logs	1	...	
		Horns head loads	1	...	
		Teak poles	424	...	
Nimar ...	Ratagarh ...	Doura pauts	1	...	
	Punassa ..	Grass pulas	25	...	
		Teak choolias	1	...	
		Bullock hide	1	...	
		Bambus	4,325	..	
		Grain maunds	24	...	
		Wheat „	2	...	
	Kirgaon ...	Jowar „	43	...	
		Jowar stalk bundles ..	300	...	
		Mung maunds	9	...	
		Tur „	2	..	
		Oranges	8	...	
		Indian corn maunds ...	22	...	
		Grass poolas	9,247	...	
		Ropes	2	..	
	Aonlia ...	Chironji maunds	22	...	
		Charputs „	16	...	
		Lac „	1	...	
		Teak choolias	3	...	
	Ralwa ...	Firewood	...	500	
	Kheri ...	Do.	...	11,593	
		Do.	4,026	...	
	Chaoria ...	Pauts	1	...	
		Kalis	2	...	
		Charputs	2	...	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Nimar ...	Kaleebheet ...	Wood pieces	204	...	
	Gunjari ..	Do.	4	...	
Chanda ..	Thapad ..	Bambus	3,674	...	
	Tiddi ...	Do.	8,491	...	
		Teak sleepers	58,671	93,310	
		Saj sleepers	61,956	1,03,218	
		Firewood maunds ...	16	...	
	Nagpur ...	Teak scantlings	6	9	
		Bambus	30	...	
	Mohurli ...	Hurra maunds	202	...	
		Horns	779	...	
		Sugar cane	275	...	
		Dhooras	4	...	
	Chanda ..	Sheeshum wood pieces ...	2	...	
		Cot wood pieces	1	...	
		Saj planks	1	...	
	Taroba ..	Saj logs	1	14	
		Rohun logs	1	10	
		Satin wood logs	52	172	
	Allapally ...	Cot wood	4	...	
		Grass heaps	2	...	
	2nd Class Reserved Forests. ...	Wood of different kinds ...	328	...	
		Bambus	282	...	
		Hides	1	...	
		Ascoors	85	...	
		Charcoal kawar load ...	15	...	
		Firewood head " ...	5	...	
Sooni ...	Nagpur ...	Teak poles	32	...	
	Do. ...	Bambus	193	...	
	Ambagarh ...	Do.	306	...	
	Rukhur ..	Refused Teak pieces cartloads ...	78	...	
		Teak pieces	97	...	
		Boeja pieces	10	...	
		Tinsa pieces	28	...	
		Tendu do.	1	...	
		Saj do.	38	...	
	East Ponch ...	Sheesham piece	1	...	
	Korai ...	Teak poles	722	...	
		Jungle wood sleepers ...	545	...	
		Bambus	57,128	...	
		Do. cart load	21	...	
		Grass poolas	99,862	...	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
	Arvi ...	Teak poles	336	...	
		Teak fellies	17	...	
		Teak scantlings	36	...	
		Dhooras	92	...	
		Salai boards	2	...	
		Teak bits	40	...	
		Ber kanas	3,467	...	
		Ascoors	366	...	
		Bambus	5,125	...	
		Grass pulas	99,387	...	
		Wood pieces	2	...	
		Teak leaves head loads ...	197	...	
		Fuel maunds	38	...	
		Gum Do.	7	...	
		Bhibas	1	...	
		Total ...	252,117	40,181	
		SOLD LOCALLY.			
Mandla ...	Mandla ...	Sal scantlings	36	52	
		Boats	6	...	
		Sal Furdas	20	...	
		Bullies	4	...	
		Bambus	7,312	...	
		Takur maunds	15	...	
	Murwara ...	Sal sleepers 10×10× 5 ...	22	78	
		Do. 6× 8×4½ ...	100	150	
	Singrampur ...	Lac maunds	10	...	
		Firewood	2,150	...	
		Satcutta pieces	4	...	
		Teak bullies	1,623	...	
		Malgas satcutta	2	...	
		Bambus	12,889	...	
		Teak kurreos	483	...	
		Do. malgas	30	...	
	Barela ...	Hurra maunds	37	...	
		Bambus	11,434	...	
	Chisgaon ...	Sal sleepers 6× 8×4½ ...	108	169	
	Bijragogarh ...	Lac maunds	2	...	
		Hurra Do.	7	...	
		Bambus	15,454	...	
	Mocha ...	Sal Furdas	154	...	
	South Phen ...	Stag horns maunds ...	2	...	
	Topla ...	Do.	1	...	
	Jagmandal ...	Do.	7	...	
	Banjar Valley Forest...	Do.	4	...	
		Hides	7	...	
		Teak log	1	...	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Betul ...	Bowergarh ...	Teak logs	63	...	
	Khamapur ...	Do.	6	...	
	Bhaisdahee ...	Hurra maunds	572	...	
	Neempani ...	Do.	4	...	
	Chicholi ...	Do.	50	...	
	Aunla ...	Do.	148	...	
Hoshangabad ...	Jarpha ...	Gulli maunds	2	...	
		Firewood cart loads ...	1	...	
	Burwani ...	Gulli maunds	5	...	
		Teak stumps	4,367	...	
		Teak saktjes	309	...	
		Firewood cart loads ...	36	...	
		Teak choolias	716	...	
	Dhekna ...	Teak stumps	3,280	...	
		Teak sakties	2,682	...	
		Bai Barang maunds ...	3	...	
		Teak choolias	122	...	
	Jawardha ...	Teak stumps	15,989	...	
		Tinus poles	14	...	
		Firewood cart loads ...	48	...	
		Teak khakers	2,550	...	
	Mayardha ...	Teak stumps	1,253	...	
		Teak sakties	2,059	...	
		Firewood cart loads ...	29	...	
	Joli ...	Beeja sal sleepers ...	1	1	
		Dhaura sleepers	10	14	
	Kankri ...	Teak logs	91	456	
	Tokra ...	Do.	1	...	
		Tinus pole)	1	...	
		Haldoo log	1	...	
		Khair poles	13	...	
	Rajaborari ...	Bambus	1,643	...	
		Hurra maunds	15	...	
	Gorakhal ..	Teak choolias	6	...	
	2nd Class Reserved Forests ...	Jungle wood sleepers ...	149	...	
		Wood pieces	280	...	
		Firewood pony loads ...	2	...	
		Do. cart loods ...	2	...	
		Do. head loads ...	41	...	
		Do. bull loads ...	18	...	
		Lac Do.	4	...	
		Do. maunds ...	2	...	
		Bambus	54	...	
		Charcoal head loads ...	6	...	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Seoni ...		Fuel cart loads	133	...	
		Do. head loads	143	...	
Saugor ...	Garhakota ..	Teak poles	4,942	...	
		Teak logs	32	22	
		Saj logs	1	2	
		Lac maunds	22	...	
		Kardha logs	1	25	
	Goorjhamar ...	Teak poles	668	...	
	Chitoli ...	Saj poles	2,704		
	2nd Class Reserved Forests ...	Teak planks	192	...	
		Waif wood pieces	4	...	
		Teak poles	442	...	
		Common poles	1,181	...	
		Saj poles	22	...	
		Mohwa tree	1	...	
		Beja poles	4	...	
		Behra tree	1	...	
		Minor produce maunds ...	115	...	
		Grass maunds	6	...	
		Bainbus	88	...	
		Charcoal maunds ...	29	...	
		Firewood „	138	...	
		Building wood „	50	...	
Wardha. .	Different places in Forest ...	Charcoal „	1	...	
		Teak poles	6,616	...	
		Fuel maunds	469	...	
		Rafters	292	...	
		Grass pulas	980	...	
		Pieces of wood	4	...	
		Beams	2	...	
		Leaves bundles	16	...	
		Charkhas	2	...	
		Khat	1	...	
		Ber Kanas	7	...	
		Skin	1	...	
				...	
		Sāj golas	30	...	
Balaghat ...	Madgi ...	Bambus	2,418	...	
	Kardha ...	Do.	2,367	...	
		Total ...	4,26,105	2,09,795	
		ABSTRACT SALES FROM DEPOTS			
		Teak logs round	242	4,453	
		Sal logs round	232	9,090	
		Teak logs squared ...	19	278	
		Sal logs squared	35	322	
		Logs other than Teak and Sal ...	60	375	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		Teak scantlings	4,216	4,460	
		Sal scantlings	95	78	
		Sal sleepers	5,386	15,041	
		Teak planks	4	3	
		Planks other than Teak and Sal ...	450	274	
		Teak slabs or furdas ...	308	1,429	
		Teak poles	480	...	
		Poles other than Teak and Sal ...	5,265	4,378	
		Teak pieces marketable ...	44	...	
		Sal pieces do. ...	33	...	
		Pieces marketable other than Teak and Sal	2,102	...	
		Boats	6	...	
		Total ...	18,977	40,181	
		Fuel pieces	399	...	
		Do. maunds	836	...	
		Charcoal maunds	7	...	
		Bambus	17,538	...	
		Grass pulas	2,14,042	...	
		Lac maunds	2	...	
		Honey „	1	...	
		Skin	1	...	
		Ropes	71	...	
		Mohwa maunds	8	...	
		Gum „	27	...	
		Fruits „	10	..	
		Bhibas „	1	...	
		Leaves bundles	197	...	
		Total ...	2,33,140	...	
		Grand Total ..	252,117	40,181	
		SOLD LOCALLY.			
		Teak logs round	214	478	
		Logs other than Teak and Sal ...	58	223	
		Teak scantlings	6	9	
		Sal scantlings	36	52	
		Teak sleepers	58,671	93,310	
		Sal sleepers ... ⋮	230	397	
		Sleepers other than Teak and Sal.	62,661	1,03,233	
		Teak planks	192	...	
		Planks other than Teak and Sal ...	1	...	
		Teak pieces marketable ...	2,317	...	
		Sal pieces do. ...	174	...	
		Pieces marketable other than Teak and Sal	1,068	...	
		Teak poles	49,161	...	
		Poles other than Teak and Sal ...	4,351	...	
		Boats	6	...	
		Total ...	1,79,146	1,07,702	

Form No. 61.—(Continued.)

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		Brought over ...			
		Fuel	...	12,093	
		Do. maunds	6,798	...	
		Do. cart loads	249	...	
		Do. bullock loads ...	20	...	
		Do. head loads	189	...	
		Charcoal maunds ...	30	...	
		Do. head loads	6	...	
		Do. cart loads	1	...	
		Do. Kawar loads ...	15	...	
		Bámbus	1,27,803	...	
		Grass pulas	1,09,976	...	
		Do. heaps	2	...	
		Fruits maunds	23	...	
		Do. head loads	3	...	
		Do.	8	...	
		Lac maunds	35	...	
		Do. bullock loads ...	4	...	
		Skin	1	...	
		Hides	9	...	
		Hurra maunds	1,036	...	
		Mohwa do.	11	...	
		Do. head loads ...	5	...	
		Horns	192	...	
		Do. head loads	1	...	
		Ropes	2	...	
		Leaves Bundles	16	...	
		Grain maunds	102	...	
		Seeds Do, ...	15	...	
		Gulli Do.	7	...	
		Do. head loads ...	6	...	
		Other minor produce ..	276	...	
		Do. maunds	118	...	
		Total ...	2,46,959	12,093	
		Grand Total ...	4,26,105	2,09,795	

Annual Form No. 62.—(*Prescribed.*)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the year 1881-82.

Particulars.	No. or quantity	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Logs round ... Teak ...	2,225	30,594		
Logs round ... Sal ...	131	5,385		
Logs squared ... Teak ...	164	2,390		
Logs squared ... Sal ...	15	147		
Logs other than Teak and Sal ...	23	256		
Scantlings ... Teak ...	20,778	23,910		
Scantlings ... Sal ...	...	...		
Sleepers ... Teak ...	111	386		
Sleepers ... Sal ...	4,002	9,503		
Sleepers other than Teak and Sal ...	1	3		
Teak slabs or furdas ...	1,109	4,438		
Teak planks ...	35	23		
Sal pieces marketable ...	1	...		
Pieces marketable other than Teak and Sal ...	959	...		
Teak poles ...	175	...		
Poles other than Teak and Sal ...	5,216	...		
Boats ...	9	...		
Fuel pieces ...	2	...		
Honey maunds ...	9	...		
Bhibas do. ...	1	...		
Gum do. ...	1	...		
Ropes ...	10	...		
Bambus ...	2,090	...		
Grass poolas ...	70,275	...	107,342	77,035

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchasers from depots.				
Logs round ... Teak ...	242	4,453		
Logs round ... Sal ...	232	9,090		
Logs squared ... Teak ...	19	278		
Logs squared ... Sal ...	35	322		
Logs other than Teak and Sal ...	60	375		
Scantlings ... Teak ...	4,216	4,460		
Scantlings ... Sal ...	95	78		
Sal sleepers ...	5,386	15,041		
Teak planks ...	4	3		
Planks other than Teak and Sal ...	450	274		
Teak slabs or furdas ...	308	1,429		
Teak poles ...	480	...		
Poles other than Teak and Sal ...	5,265	4,378		
Pieces marketable. Teak ...	44	...		
Pieces marketable. Sal ...	33	...		
Pieces marketable other than Teak and Sal ...	2,102	...		
Boats ...	6	...		
Fuel pieces ...	399	...		
Fuel maunds ...	836	...		
Lac do. ...	2	...		
Honey do. ...	1	...		
Skin ...	1	...		
Ropes ...	71	...		

Received from Forests in depots.					
Logs round ... Teak	...	11	243		
Logs round ... Sal	...	101	3,705		
Sal logs squared	...	20	175		
Logs other than Teak and Sal	...	235	474		
Scantlings ... Teak	...	100	...		
Scantlings ... Sal	...	234	236		
Sal sleepers	...	5,108	11,577		
Sleepers other than Teak and Sal	...	31	46		
Teak slabs or furdas	...	112	389		
Teak planks	...	159	152		
Planks other than Teak and Sal	...	4,092	1,949		
Teak poles	...	606	...		
Poles other than Teak and Sal	...	4,320	4,378		
Pieces marketable. Teak	...	44	...		
Pieces marketable. Sal	..	35	...		
Pieces marketable other than Teak and Sal	...	3,834	...		
Boats	...	5	...		
Fuel pieces	...	397	...		
Bhibas maunds	...	2	...		
Ropes	...	61	...		
Gum do.	...	28	...		
Charcoal do.	...	26	...		
Kossa	...	35	...		
Fruits maunds	...	11	...		
Fuel do.	...	1,251	...		
Lac do.	...	4	...		
Skin	...	1	...		
Mohwa maunds	...	8	...		
Leaves bundles	...	197	...		
Grain maunds	...	4	...		
Bambus	..	28,970	...		
Grass poolas	...	551,026	...		
				601,068	23,324
Mohwa maunds	...	8	...		
Gum do.	..	27	...		
Fruits do.	...	10	...		
Bhibas do.	..	1	...		
Charcoal do.	...	7	...		
Leaves bundles	...	197	...		
Bambus	...	17,538	...		
Grass poolas	...	214,042	...		
				252,117	40,181
Sold locally.					
Teak logs round	..	214	478		
Logs other than Teak and Sal	..	58	223		
Scantlings ... Teak	...	6	9		
Scantlings ... Sal	...	36	52		
Sleepers ... Teak	...	58,671	93,310		
Sleepers ... Sal	...	230	397		
Sleepers other than Teak and Sal	...	62,661	103,233		
Fuel	..	...	12,093		
Teak planks	..	192	...		
Planks other than Teak and Sal	...	1	...		
Pieces marketable. Teak	...	2,317	...		
Pieces marketable. Sal	...	174	...		
Pieces marketable other than Teak and Sal	..	1,068	...		
Teak poles	...	49,161	...		
Poles other than Teak and Sal	..	4,351	...		
Boats	..	6	...		
Charcoal maunds	...	30	...		
Do. head loads	..	6	...		
Do. cart loads	...	1	...		
Do. kawar loads	...	15	...		
Fruits maunds	...	23	...		
Do. head loads	...	3	..		

Annual Form No. 62.—(*Continued.*)

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
REMOVED FROM THE FORESTS AND SOLD LOCALLY.				
Teak logs round ...	214	478		
Logs other than Teak and Sal ...	58	223		
Scantlings ... Teak ...	6	9		
Scantlings ... Sal ...	36	52		
Sleepers ... Teak ...	58,671	93,310		
Sleepers ... Sal ...	230	397		
Sleepers other than Teak and Sal ...	62,661	103,233		
Fuel ...	...	12,093		
Teak planks ...	192	...		
Planks other than Teak and Sal ...	1	...		
Pieces marketable. Teak ...	2,317	...		
Pieces marketable. Sal ...	174	...		
Pieces marketable other than Teak and Sal ...	1,068	...		
Teak poles ...	49,161	...		
Poles other than Teak and Sal ...	4,351	...		
Boats ...	6	...		
Charcoal maunds ...	30	...		
Do. head loads ...	6	...		
Do. cart loads ...	1	...		
Do. kawar loads ...	15	...		
Fruits maunds ..	23	...		
Do. head loads ...	3	...		
Do. ...	8	...		
Fuel maunds ...	6,798	...		
Fuel cart loads ...	249	...		
Fruits head loads ...	8	...		
Fuel maunds ...	6,798	...		
Do. cart loads ...	249	...		
Do. bullock loads ...	20	...		
Do. head loads ..	189	...		
Lac maunds ...	35	...		
Do. bullock loads ...	4	...		
Skin ...	1	...		
Hides ..	9	...		
Hurra maunds ...	1,036	...		
Mohwa do. ...	11	...		
Do head loads ..	5	...		
Horns ...	192	...		
Do. head loads ..	1	...		
Ropes ..	2	...		
Leaves bundles ..	16	...		
Grain maunds ..	102	...		
Seeds do. ...	15	...		
Gulli maunds ...	7	...		
Do. head loads ...	6	...		
Other minor produce ...	276	...		
Do. maunds ...	118	...		
Bambus ...	127,803	...		
Grass pulas ...	109,976	...		
Do. heaps ...	2	...	426,105	209,795

Fuel bullock loads	...	20	...			LOST OR WRITTEN OFF AS USELESS.		34	64		
Do. head loads	...	189	...					3	...		
Lac maunds	...	35	...			Sal sleepers	...	1	...		
Do. bull loads	..	4	...			Honey maunds	..	93,816	...		
Skin	...	1	...			Fruits do.	...			93,854	64
Hides	...	9	...			Grass poolas	...				
Hurra maunds	...	1,036	...			USED BY THE DEPARTMENT.					
Mohwa do.	...	11	...								
Do. head loads	...	5	...			Planks other than Teak and Sal	..	7	3		
Horns	...	192	...			Teak poles	..	37	...		
Do. head loads	...	1	...			Pieces marketable other than Teak and Sal	..	54	...		
Ropes	...	2	...			Firewood maunds	..	223	...		
Leaves bundles	...	16	...			Bambus	..	42	...		
Grain maunds	...	102	..			Grass poolas	..	20,300	...		
Seeds do.	...	15	...							20,663	3
Gulli do.	...	7	...			DECREASE BY REMEASUREMENT.					
Gulli head loads	...	6	...								
Other minor produce	..	276	...			Teak logs round	..	...	1		
Do. maunds	...	118	...			Logs other than Teak and Sal	...	...	11		
Bambus	...	127,803	...			Teak planks	..	...	152		
Grass pulas	...	109,976	...			Planks other than Teak and Sal	..	...	355		
Do. heaps	...	2	...							...	519
						TREATED AS FURD AS &c.					
RECEIVED BY TRANSFER FROM SALE DEPOTS.											
						Sleepers Teak	...	111	386		
Dhooras	...	16	...			Sleepers other than teak and Sal	..	1	3		
Teak fellies	...	5	...							112	389
				21	...	TRANSFERRED TO OTHER SALE DEPOTS.					
						Dhooras	...	16	...		
						Teak fellies	...	5	...		
										21	...
						BALANCE AT CLOSE OF THE YEAR.					
						Teak logs round	...	1,994	26,383		
						Teak logs squared	...	145	2,112		
Grand Total	...	...	...	1,134,536	310,134	Logs other than Teak and Sal	...	198	344		

Annual Form No. 62.—(*Continued.*)

Particulars.	No. or quantity.	Cubic feet.	Total of each head.		Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
			No. or quantity.	Cubic feet.				No. or quantity.	Cubic feet.
					Teak slabs or furdas ...	913	3,398		
					Scantlings ... Teak ...	16,662	19,450		
					Scantlings ... Sal ..	139	158		
					Sal sleepers ..	3,690	5,975		
					Sleepers other than Teak and Sal ...	31	46		
					Teak planks ...	190	20		
					Planks other than Teak and Sal ...	3,635	1,317		
					Teak poles ...	264	...		
					Poles other than Teak and Sal ...	4,271	...		
					Sal pieces marketable ..	3	...		
					Pieces marketable other than Teak and Sal ...	2,637	...		
					Charcoal maunds ...	19	...		
					Kossa ..	35	...		
					Boats ...	8	...		
					Fuel maunds ...	192	...		
					Lac do. ...	2	...		
					Honey do. ...	5	...		
					Gum do. ...	2	...		
					Bhibas do. ..	2	...		
					Grain do. ...	4	...		
					Bambus ...	13,480	...		
					Grass pulas ...	293,143	...	341,664	59,203
					Grand Total ...	...	...	1,134,536	310,154

FORM No. 63

FOREST DEPARTMENT, CENTRAL PROVINCES.

Timber and other produce cut, collected and removed from the Forest by consumers or purchasers including Pasture during the year 1881-82.

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
Direction ...	Bambus ..	12,225	61	61	
	Total Bambus ...	12,225	61	61	
	Grass cart loads ...	136	35	35	
	Do. Kawar load ...	20	2	2	
	Do. Pony load ...	76	2	2	
	Total Grazing ...	232	39	39	
	Total revenue under II ...	12,457	100	100	
Mandla ...	Teak logs ..	14	10	10	
	Bullies ...	163	6	6	
	Satcutta bullies ...	87	3	3	
	Wood pieces ...	1	...	...	
	Total Timber ...	265	19	19	
	Firewood Kawar load ...	361	6	6	
	Do. Cart load ...	30	7	7	
	Do. Head load ...	71	1	1	
	Total Firewood ...	462	14	14	
	Bambus ...	42,275	227	227	
	Grazing oows and bullocks ...	12,147	1,575	1,575	
	Do. buffaloes ...	676	145	145	
	Do. horses ..	2	2	2	
	Do. goats ...	1	...	...	
	Grass bundles ...	70,422	70	70	
	Total Grazing ..	83,248	1,792	1,792	
	Skins ...	16	16	16	
	Mowah Maunds ...	415	92	92	
	Gum . Seers ..	55	5	5	
	Babai bundles ...	58	31	31	
	Leaves do. ...	1,124	7	7	
	Molain bark ...	819	2	2	
	Tendu fruits ...	500	...	...	
	Chironji, seers ...	62	8	8	
	Honey, seers ...	25	10	10	
	Kund, bangy load ...	12	1	1	
	Lac by contract ...	...	200	200	
	Mowah seed oil, seers ...	67	12	12	
	Miscellaneous ...	...	54	54	
	Pieces ...	2,529	438	438	
	Total Minor produce Mds. ...	420			
	Total Revenue under II ...	No. 1,28,776 Mds. 420	2,490	2,490	

FORM No. 63.—(Contd).

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
Betul Dn. ...	Building wood cart load ...	416	2,076	2,076	
	" karas " ...	342	1,491	1,491	
	" head " ...	1,32[illegible]	1,206	1,194	
	" bullock " ...	11,764	8	8	
	Logs ...	21	3	3	
	Poles ...	4	24	294	
	Teak poles ...	88	25	171	
	Axles for carts ...	66	171	2	
	Pars for do. ...	8	2	1	
	Jowars ...	2	1	32	
	Poles Mials, &c. ...	260	32	21	
	By auction ...	90	21	1	
		...	1	—	
	Total Timber ...	14,061	5,806	5,29[illegible]	
	Firewood Head load ...	1,42,323	816	816	
	" Karas " ...	403	35	35	
	" Bullock " ...	550	83	77	
	" Ass " ...	24	1	1	
	Fuel, bush, and Kahri cart load	2,241	406	406	
	Ghur Karach licenses ...	2,972	3,272	3,273	
	Charcoal Head load ...	56	3	3	
	Total Firewood ...	1,48,569	4,616	4,611	
	Bambus ...	3,72,068	3,617	3,617	
	Total ...	3,72,068	3,617	3,617	
	Buffaloes ...	21,892	5,460	5,460	
	Bullocks ...	2,94,645	16,098	16,098	
	Goats ...	34,107	639	639	
	Grass cart load ...	4,257	860	860	
	" Head load ...	25,871	699	698	
	" Bullock ...	2,823	263	245	
	By auction ..	...	2	2	
	Total Grazing ...	3,83,595	24,021	24,002	
	Mohwa contract ...	...	2,620	2,620	
	Mangoe fruits contract ...	...	5	5	
	Fishing do. ..	...	52	52	
	Hurra ...	...	1,305	1,305	
	Gulli and Chironji do. ...	...	23	23	
	Horns and skins ...	...	128	128	
		Mds. Srs.			
	Mowah ...	12 30	5	5	
	Skins ...	31	27	27	
	Mango trees ...	2	1	1	
	Honey contract ...	...	20	20	
	Skins ...	...	20	20	
	Chironji and lac bullock load..	6	7	7	
	Horns head " ...	85	11	11	
	Pounder &c. contract ...	...	75	75	
	Horns Bullock loads ...	13	11	11	
	Mowah for Ghurkarach loads..	176	264	264	
	Horns ..	65	4	4	
	Gulli and bush cart loads ...	4	1	1	
	Mowah cart load ...	12	27	27	
	Do. Head " ...	21	2	2	
	Do. Ass " ...	5	5	5	
	Do. Bullock " ...	95	94	9[illegible]	

FORM No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
	Mohwah Manis load ...	7	8	8	
	Hurra cart load ...	4	10	10	
	Do. Bullock „ ...	184	92	92	
	Do. Maunds ...	53	34	34	
	Chironji Bullock load ..	214	276	276	
	Do. Ass „ ...	25	11	11	
	Do. Head „ ...	123	27	27	
	Lac bullock load ...	22	27	27	
	Do. Head load ...	127	24	24	
	Do. seer ...	1	1	1	
	Bai buring bull load ...	12	6	6	
	Dhowrah cart load ...	5	5	5	
	Do. bull load ...	87	40	40	
	Skins cart „ ..	74	164	164	
	Do. Bull „ ...	129	127	127	
	Do. Head „ ...	532	65	65	
	Cocoons Bull „ ...	13	26	26	
	Do. Head „ ...	8	4	4	
	Gorainhi Bull „ ...	2	4	4	
	Do. Head „ ...	15	7	7	
	Salaj cart load ...	10	20	20	
	Salaj bull load ...	24	12	12	
	Lime cart load ...	3	3	3	
	Do. bull do. ...	48	16	16	
	Do. head „ ...	51	7	7	
	Lime stone cart load ...	92	47	47	
	Stones, cart load ...	115	29	29	
	Do. bull „ ...	33	6	6	
	Gum bull „ ...	25	74	74	
	Do. head „ ...	5	2	2	
	Wax and honey ...	1	2	2	
	Clay cart load ...	24	12	12	
	Do. bull „ ...	1	...	...	
	Do. ass „ ...	262	17	17	
	Do. head„ ...	7	...	...	
	Kajoor bull „ ...	2	4	4	
	Bhilawa cart load ...	1	2	2	
	Do. bull „ ...	149	75	75	
	Do. head „ ...	63	9	9	
	Bush cart load ..	91	21	21	
	Do. bull „ ...	8	...	...	
	Do. head „ ...	123	4	4	
	Kokri cart load ...	62	15	15	
	Bacal do. ...	21	3	3	
	Do bull do. ...	4	1	1	
	Do. Head „ ...	314	6	6	
	Teak leaves ...	843	76	71	
	Total ...	4,547	6,128	6,123	
	Total Revenue under II. ...	922,840	43,088	43,647	
Hoshangabad.	Commutation fees ...		4,490	4,490	
	Total ...		4,490	4,490	
	Tinnus wood poles ...	1,413	575	575	
	Do. Joties ...	496	361	361	
	Do. 2 bullock cart loads ...	486	1,947	1,947	
	Do. logs ...	7	3	3	

FORM No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks..
	Description.	No. or quantity.			
	Tinus 4bullock cart loads ...	26	156	156	
	Dhaora wood poles ...	347	83	83	
	Dhaora Joties ...	3	1	1	
	Do. 2 bull cart loads ...	83	290	290	
	Do. Axles ...	988	305	305	
	Do. Patties ...	2	2	2	
	Kahu wood poles ...	7	4	4	
	Do. Chulias ...	4	1	1	
	Tendu wood poles ...	216	54	54	
	Do. Joties ...	4	2	2	
	Do. 2 bullock cart loads ..	2	7	7	
	Aounla wood poles ...	29	5	5	
	Gular trees ...	1	5	5	
	Mohka wood poles ...	6	6	6	
	Gut ber, head loads ...	6	1	1	
	Khair wood, 2 bullock cart loads	12	42	42	
	Do. poles ...	1	...	...	
	Achar wood „ ...	4	2	2	
	Palas wood, head load ...	16	2	2	
	Sheeshum wood, poney load...	3	4	4	
	Temru wood, 4 bullock cart loads ...	4	14	14	
	Salai wood, Joties ..	4	2	2	
	Molaiz wood, Lupkas ...	48	10	10	
	Karolia wood, head loads ...	44	2	2	
	Lendia wood, Joties ...	34	16	16	
	Do. 2 B. C. load ...	40	153	153	
	Do. Poles ...	46	20	20	
	Lendia wood 4 B. C. loads ...	2	9	9	
	Do. Poney load ...	548	132	132	
	Teak wood poles ...	35	25	25	
	Do. Logs ...	296	280	280	
	Do. cubic feet ...	562	280	280	
	Do. Head loads ...	4	...	...	
	Do. joties ...	3	1	1	
	Do. chulias ...	17	3	3	
	Do. sakties ...	8,387	1,269	1,269	
	Do. 2 B. C. loads ...	46	114	114	
	Do. 4 B. C. „ ...	1	7	7	
	Do. pony „ ...	87	124	124	
	Unreserved wood head loads	143	28	28	
	Do. pony load ...	187	21	21	
	Do. joties ...	95	8	8	
	Haldu and kaim pieces ...	34	55	55	
	Do. poles 2 bullock cart loads ...	9	27	27	
	Haldu and kaim logs ...	22	55	55	
	Do. 4 B. C. loads ...	20	110	110	
	Poles ...	5	5	5	
	Sewan wood poles ...	1	2	2	
	Dhamun do. ...	1	...	...	
	Building wood pieces ...	1,188	916	916	
	Do. 4 B. C. loads ...	136	255	255	
	Do. 2 ditto ...	5,757	10,353	10,353	
	Do. joties ...	760	296	296	
	Do. head loads ...	144,662	1,001	1,001	
	Total Timber...	167,390	19,451	19,451	
	Firewood head load ...	36,254	499	499	
	Do. 2 B. C. loads ...	24,726	3,288	3,288	
	Do. 4 do. ...	254	116	116	

Form No. 63.—(Contd.)

Division.	Produce removed.		Amount or quantity.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs.	Rs.	
	Firewood donkey & pony loads...	383	15	15	
	Do. cattle sheds ...	10	6	6	
	Do. trees ...	14	9	9	
	Do. charcoal 2 B. C. loads.	94	141	141	
	Do' pony loads ..	1,183	22	22	
	Total Firewood ...		4,096	4,096	
	Bambu pieces ...	10,17,320	9,789	9,789	
	Do. head loads ...	2	...	...	
	Total Bambus ..	10,17,322	9,789	9,789	
	Grazing buffaloes ...	27,698	5,813	5,813	
	Do. cows and bullocks...	257,942	18,222	18,222	
	Do. cattle ...	852	34	34	
	Do. sheep ...	42,726	268	268	
	Do. ponies ...	565	8	8	
	Do. camels ...	123	29	29	
	Grass 2 B. C. loads. ...	4,360	851	851	
	Do. 4 do. ...	74	32	32	
	Do. head loads ...	11,951	138	138	
	Do. buffaloe ...	210	8	8	
	Grass auction ..	...	598	598	
	Grass pullas ..	12,125	7	7	
	Thorns 2 B. C. loads ...	...	11	11	
	Total Grazing ...	358,626	26,019	26,019	
	Chironji mds. seers. ...	173 36½	176	176	
	Do. pony loads ...	1	6	6	
	Do. head ...	29	25	25	
	Do. pias ...	16	5	5	
	Gum mds. seers. ...	261-4-8	20	20	
	Do. head loads ...	70	17	17	
	Do. kurus ...	6	7	7	
	Do. pony laods ...	44	77	77	
	Gulli mds. sers. ...	221-1-8	53	53	
	Do. head load ...	1,722	64	64	
	Do. bull " ...	103	13	13	
	Do. manis ...	6	19	19	
	Do. kurus ...	18	7	7	
	Tatties head load ...	3,471	416	416	
	Do. 2 B. C. loads ...	1	2	2	
	Mhowa md. sers. ...	128-32	16	16	
	Do. 2 B. C. loads. ...	36	66	66	
	Do. pony loads ...	79	47	47	
	Do. pais and seers ...	4-10	...	...	
	Do. maunds manis ...	17-19	860	860	
	Do. head loads ...	661	268	268	
	Leaves ...	800	...	...	
	Do. 2 B. C. loads. ..	28	14	14	
	Do. head " ...	3,037	98	98	
	Thorns 2 B. C. " ...	3,338	432	432	
	Do. Head " ...	260	2	2	
	Do. 4 B. C. " ...	30	7	7	
	Horns ...	765	209	209	
	Do. head " ...	57	4	4	
	Do. pony " ...	20	5	5	

Form No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs.	Rs.	
	Hides ...	345	90	90	
	Do. head loads ...	6	...	...	
	Do. auction " ...	...	568	568	
	Fruits 2 B. C. loads ...	1,209	420	420	
	Do. head " ...	4,922	141	141	
	Do. buffaloe " ...	17	1	1	
	Mangoe trees ...	12	218	218	
	Tamarind trees ..	4	1	1	
	Tamarind Maund. ...	1	...	...	
	Miscellaneous ..	...	4	4	
	Musli contract ..	...	14	14	
	Canes ...	34	2	2	
	Fishing nets tax ...	10	40	40	
	Feathers ..	101	3	3	
	Bambu materials 2 B. C. loads	32	47	47	
	Do. Head loads ...	4,083	255	255	
	Hurra pullas ...	3	1	1	
	Do. mani kundi ...	1·20	9	9	
	Behera contract ...	...	330	330	
	Hurra auction ...	...	119	119	
	Behera head loads ...	10,274	321	321	
	Do. 4 B. C. ...	63	48	48	
	Do. Bullock ...	564	279	279	
	Lac contract ...	714	7	7	
	Do. maunds ...	13	15	15	
	Do. head loads ...	14	12	12	
	Bark head loads .	2	...	...	
	Do. 2 B. C. loads ...	17	68	68	
	Backle head " ...	2,186	71	71	
	Do. 4 B. C. " ..	2	3	3	
	Do. 2 B. C. " ...	25	31	31	
	Do. donkey " ...	3	...	...	
	Wax Mds. Sers ...	7 34	11	11	
	Honey " " ..	3 5	17	17	
	Do. head loads ...	10	15	15	
	Do. auction ...	...	31	31	
	Clay 2 B. C. loads ...	480	90	90	
	Do. bullock load ...	830	25	25	
	Do. buffaloe load ...	2	...	...	
	Do. head " ...	1,353	17	17	
	Fishes head . " ...	117	7	7	
	Clay for Potters wheels ...	5	10	10	
	Lime stone ...	19	...	...	
	Do. 2 B. C. loads ...	57	18	18	
	Do. pony " ...	2	2	2	
	Do. buffaloe " ...	3	...	...	
	Stones 2 B. C. " ...	19	4	4	
	Do. head " ...	11	...	...	
	Kund head " ...	77	6	6	
	Do. 4 B. C. " ..	14	31	31	
	Do. 2 B. C. " ..	170	255	255	
	Brooms ...	57	1	1	
	Cattle sheds ...	5	5	5	
	Do. auction ...	...	55	55	
	Sand 2 B. C. loads ...	4	1	1	
	Elephant's tusk ...	...	5	5	
	Total Minor produce ...	Mds. 581 42,450	6,659	6,659	
	Total Revenue under II. ...	...	70,504	70,504	

Form No. 63.—(Contd.)

Division.	Produce removed.		Amount of Revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs.	Rs.	
Nimar Dn. ...	Commutation ...	...	9,935	9,935	
	Total ...	...	9,935	9,935	
	Dry teak 2 bullock cart loads...	170	935	935	
	Do. pieces ..	423	520	520	
	Teak fellies ...	40	4	4	
	Haldu beams 2 bullock cart loads ..	83	249	249	
	Do. 4 bullock cart loads	15	75	75	
	Do. Joti Head loads	837	628	628	
	Tinus poles 2 bullock cart loads	88	308	308	
	Do. Joti loads ..	35	28	28	
	Do. ..	178	67	67	
	Tinnus ploughs ...	18	2	2	
	Hoes ..	312	39	39	
	Do. cart loads .	1	4	4	
	Chuliias do ..	28	85	85	
	Khair ploughs and poles 2 bullock cart loads ..	105	315	315	
	Do. 4 B. C. loads ..	1	4	4	
	Khair ploughs and poles ..	5	2	2	
	Khair poles ..	6	1	1	
	Temru cart poles 2 bullock cart loads ..	15	45	45	
	Do ..	13	5	5	
	Anjan Kalias ..	13	7	7	
	Teak pieces ...	2	...	...	
	Dhowra axles ..	499	78	78	
	Do. ..	46	116	116	
	Do. pieces ..	1	1	1	
	Dhowra ploughs ...	37	5	5	
	Building wood head loads ..	1,142	143	143	
	Timber head loads ...	40	4	4	
	Do. cart loads ..	1	2	2	
	Salia do. ..	31	39	39	
	Hoe pieces .	5	...	...	
	Yokes ..	12	1	1	
	Mowah .	1	...	..	
	Anjan pole ..	1	3	3	
	Lendia head load ..	1	...	...	
	Salai pieces .	10	...	...	
	Timber ..	...	3,386	3,386	
	Total ..	4,215	7,100	7,100	
	Firewood 2 bullock cart loads.	4,047	1,012	1,012	
	Do. 4 do. ..	4	2	2	
	Do. bullock load ..	23	2	2	
	Do. head load ..	75	2	2	
	Firewood and charcoal ..	...	1,829	1,829	
	Total Firewood ..	4,149	2,847	2,847	
	Bambus ..	5,48,445	5,560	5,560	
	Do. mats head load ..	25	2	2	
	Do ropes ...	9	1	1	
	Bambus ...	...	2,724	2,724	
	Total bambus ...	5,48,479	8,286	8,286	

Form No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs.	Rs.	
	Grass cart loads ...	2,407	305	305	
	Do. head loads ...	1,111	35	35	
	Do. bullock do. ...	1,038	65	65	
	Do. donga do. ...	30	45	45	
	Do. bundles ...	46,000	11	11	
	Do. 2 bullock cart loads ...	23	4	4	
	Grazing buffaloes ...	10,632	2,586	2,586	
	Do. camels ...	1	...	...	
	Do. cows and bullocks ...	29,347	3,638	3,638	
	Do. goats and sheep ...	2,587	81	81	
	Do. fodder grass ...	...	21,225	21,225	
	Total grazing ...	93,176	27,996	27,996	
	Lime kunkar cubic feet ...	2,199	27	27	
	Murum ...	250	2	2	
	Pipe clay bullock loads ...	39	12	12	
	Teak beams head loads ...	46	3	3	
	Do. do. ...	25	2	2	
	Jaman leaves do. ...	1	...	...	
	Mangoe crop trees ...	30	40	40	
	Mangoes ...	4,850	6	6	
	Buffaloe and bull hide pieces...	22	20	20	
	Do. contract ...	...	9	9	
	Gum maunds ...	1	1	1	
	Gum head loads ...	60	4	4	
	Mowah bullock loads ...	1	1	1	
	Do. maunds ...	5	3	3	
	Do. head loads ...	185	63	63	
	Other minor produce head loads	483	483	483	
	Gulli head loads ...	21	5	5	
	Do. Choukies ...	39	3	3	
	Deer horns bullock loads ...	2	1	1	
	Thorns 2 bullock cart loads...	311	78	78	
	Do. head loads ...	20	1	1	
	Sirali head loads ...	260	12	12	
	Do. cart loads ...	3	1	1	
	Ber wood ...	1	...	...	
	Manure cart loads ..	4	1	1	
	Ber fruit head loads ...	12	...	...	
	Cow dung cakes cart loads ...	14	2	2	
	Temru head loads ...	20	5	5	
	Achar head loads ...	2	...	...	
	Other minor produce ...	...	1,226	1,226	
	Total minor produce ...	8,906	2,010	2,010	
	Total Revenue under II...	...	58,174	58,174	
Chanda Dn...	Jungle wood logs cubic feet ...	6,404	1,201	1,201	
	Cart poles ...	66,671	3,221	3,221	
	Posts ...	11,044	653	653	
	Axles ...	32,629	1,661	1,661	
	Garrari carts ...	68	18	18	
	Dongas ...	9	9	9	
	Jungle wood pieces ...	4,553	303	303	
	Miscellaneous ...	220	7	7	
	Building wood (2nd) ...	...	5,233	5,233	
	Total timber ...	121,598	12,306	12,306	

Form No. 63.—(Contd.)

Division.	Produce removed. Description.	Produce removed. No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
	Firewood cart loads ...	1,404	176	176	
	Do. (2nd) ...	...	11,616	11,568	
	Charcoal cart loads ..	1	1	1	
	Do. kawar do. ...	16	2	2	
	Do. head load ...	2,188	137	137	
	Do. (2nd) ...	...	14	14	
	Total Firewood ...	3,609	11,946	11,898	
	Baskets and materials manufactured from bambus ...	1,550,624	11,741	11,741	
	Bambus (2nd) ...	...	5,332	5,332	
	Total Bambus ...	1,550,624	17,073	17,073	
	Grass cart loads ...	6,658	1,665	1,665	
	Do. head loads ...	590	17	17	
	Sone grass head loads ...	319	10	10	
	Grazing cattle ...	7,177	1,108	1,108	
	Do. sheep ...	1,563	49	49	
	Grazing (2nd) ...	...	43745	39,691	
	Total Grazing ...	16,307	45,594	42,540	
	Skins ...	95	21	21	
	Danhoonda ...	1,449	723	723	
	Other minor produce contract.	...	428	310	
	Mowah (2nd)	...	10,281	6,273	
	Other minor produce (2nd)	...	16,134	15,928	
	Total Minor Produce ..	1,544	27,587	23,255	
	Total Revenue under II ...	...	115,506	107,071	
Seoni ..	Commutation ...	37,319	10,244	10,244	
	Total ...	37,319	10,244	10,244	
	Poles of building wood ...	39,903	3,538	3,538	
	Carts of do. ...	1,666	1,761	1,761	
	Head loads of building wood...	16,674	510	510	
	Jowaras of do. ...	158	11	11	
	Total Timber ...	58,401	5,820	5,820	
	Carts of fuel ...	17,786	2,316	2,316	
	Head loads of fuel ..	44,006	474	474	
	Miscellaneous ...	...	140	140	
	Carts of charcoal ...	281	281	281	
	Head loads of charcoal ...	79,183	460	460	
	Total Firewood ...	1,41,256	3,671	3,671	
	Bambus ...	13,45,121	11,685	11,685	
	Carts of bambus ...	2,616	1,415	1,415	
	Head loads of bambus ...	16,291	544	544	
	Total bambus ...	13,64,028	13,644	13,644	
	Carts of grass pulas ...	10,977	1,385	1,385	
	Head loads of do. ...	10,213	59	59	
	Grass poolas ...	203,335	505	505	
	Grazing dues on bullocks ...	207,408	27,915	27,015	
	Do. on buffaloes ...	28,084	5,690	5,690	

Form No. 63.—(Contd.)

Division.	Produce removed. Description.	Produce removed. No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs.	Rs.	
	Grazing dues on goats ...	12,793	440	440	
	Do. on ponies ...	18	3	3	
	Do. passing heads ...	36,951	340	340	
	Miscellaneous ..	...	2	2	
	Total Grazing ...	509,779	36,339	36,339	
	Minor produce ...	...	3,824	3,824	
	Total under Revenue II ...	509,779	73,543	73,543	
Saugor ...	Cattle fees ...	...	79	79	
	Plough wood ...	...	663	663	
	Total ...	...	742	742	
	Teak logs ...	1			
	Teak poles ...	7,387	553	553	
	Teak pieces ..	285			
	Do. maunds ...	734½			
	Teak axles cart poles ...	...	...	...	
	Yokes and plough share ...	...	...	...	
	Saj poles ...	23			
	Saj pieces ...	69			
	Saj axles cart poles ...	...	38	38	
	Yokes and plough shares ...	21			
	Kohu poles and logs ...	2			
	Kurma pole ...	1			
	Mohwa poles and logs ...	17			
	Common poles ...	1,131	81	81	
	Do. pieces ...	106			
	Do. axles yokes Mds.	12¾			
	Cart poles and plough shares..	117			
Saugor Dn. ...	Teak poles ...	1,429			
	Teak axles ..	3	527	527	
		Carts 2			
	Teak pieces carts ...	Mds. 16			
	Saj poles unclassed ...	125			
	Saj axles ...	7	69	69	
	Bija poles ..	18			
	Logs and poles, &c., of different kinds ...	1,330	1,278	1,278	
	Oil and sugar mill ...	32			
	Total Timber ...	Pieces 12,113 Mds. 31,297	... 5,902	... 5,902	
	Firewood ...	Mds.346,085	7,106	7,106	
	Charcoal ...	Mds. 8,208	717	717	
	Total Firewood ...	Mds.354,293	7,823	7,823	
	Bambus ...	224,705	2,428	2,428	
	Total Bambus ...	224,705	2,428	2,428	
	Grass maunds ...	9,967	699	699	
	Grazing camels ...	9			
	Do. buffaloes ...	44,554			
	Do. oxen ..	193,572	36,581	36,581	
	Do. ponies and donkeys ...	886			
	Do. sheep and goats ...	14,983			
	Total grazing ...	488,676	37,280	37,280	

Form No. 63.—(Contd.)

District.	Produce removed. Description.		No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
				Rs.	Rs.	
	Kore kund	Mds.	363	87	87	
	Leaves	"	15,633¾	615	615	
	Fibre	"	1,912	108	108	
	Creepers	"	9¾	1	1	
	Thorns	"	6,186	281	281	
	Naigar	"	969½	18	18	
	Tendu fruits	"	123	18	18	
	Stones	"	15,258	158	158	
	Hides	"	6	11	11	
	Iron ore	"	415¾	4	4	
	Fish	"	¾	...	...	
	Kodo	"	3	10	10	
	White clay	"	432½	3	3	
	Cow dung	"	...	32	32	
Saugor Dn. ...	Iron ore and earth	"	18	...	...	
	Elephant fodder	"	1,020			
	Lime and white clay	"	18			
	Mowah flowers	"	2¾	93	93	
	Gum	Seers.	1½			
	Lac	Mds.	1½			
	Lac leases	...	...	3,637	3,637	
	Hides do.	...	...	1,084	1,084	
	Honey do.	...	...	130	130	
	Gum do.	..	...	982	982	
	Harra do.	..	...	31	34	
	Catechu leases	..	...	146	146	
	Dhowri do.	...	...	16	16	
	Total Minor Produce	...	Pieces 6 42,368¾	7,468	7,468	
	Total Revenue under II	...	...	61,643	61,643	
Wardha ...	Building wood cart loads	...	371	555	555	
	Teak poles pieces	...	2,377	742	742	
	Do.	...	...	39	39	
	Timber	...	...	409	409	
	Total Timber	..	2,748	1,745	1,745	
	Fuel	..	24,824	1,552	1,552	
	Do.	Mds.	2,413	151	151	
	Do.	...	...	202	202	
	Firewood and charcoal	...	...	3,389	3,389	
	Total Firewood	...	27,237	5,294	5,294	
	Bambus head loads	...	3	1	1	
	Do.	...	...	4	4	
	Total Bambus head loads...		3	5	5	
	Grazing cattle	...	50,749	12,256	12,256	
	Do.	...	...	2,117	2,117	
	Do.	...	...	1,669	1,669	
	Total Grazing	...	50,749	16,042	16,042	
	Other minor produce mowah...		Seers. Mds.	420	420	
	Char &c.	...	27—44	239	239	
			...	21	21	
	Total Other Minor Produce...		27—44	680	680	
	Total Revenue under II...		...	23,766	23,766	

Form

FOREST DEPARTMENT,

Revenue derived from and expenditure incurred on Timber and other

Name of Department.	Particulars of supplies.	Amount supplied.		Rate.	
		Number.	Cubic feet.	At.	Per.
				Rs. a. p.	
School of Industry, Jubbulpore ...	Teak logs ...	1	20·25	1 2 0	c. ft.
	Sal sleepers 10×10×5 ...	158	652·00	1 10 0	sleeper
	Sal logs ...	33	1,462·99	1 4 0	c. ft.
	Do. ...	9	400·62	1 0 0	do.
	Do. ...	1	16·23	1 8 0	do.
	Bambus ...	8,314	.....	.....	do.
	Do. ...	2,850	.....	20 0 0	100
	Do. ...	4,446	.....	.....	do.
	Do. ...	14	49·00	1 12 0	sleeper.
Public Works Department, Jubbulpore Division, Central Provinces ...	Sal sleepers 10×10×5 ...	5	.....	10 0 0	Boat
	Boats ...	4	122·31	0 14 0	c. ft.
	Sal logs ...	6	109·87	1 12 0	do.
	Do. ...	33	1,008·06	1 8 0	do.
	Do. ...	7	239·01	1 4 0	do
	Do. ...	2,150	Mauuds.	5 12 0	100 mds.
	Fuel ...	12	.....	0 3 0	Bambu.
	Bambus ...	2,000	.....	23 8 0	1,000
	Do. ...	1,500	.....	15 0 0	1,000
	Do. ...	...	1357	0 12 0	100 c. ft.
P. W. D. Hoshangabad Division ...	Lime Kunkar ...	8	7·168	1 12 0	c. ft.
Do. Kanhan Division ...	Teak scantlings ...	2	6·258	1 8 0	do.
	Do. ...	1	.....	1 0 0	each
	Bhira prop ...	2	.....	0 4 0	do.
	Axles ...	170	Cart loads.	0 4 0	do.
	Jungle wood poles ...	152	.....	0 2 0	do.
	Bambus ...	1	29·50	1 5 0	c. ft.
Central Jail, Jubbulpore ...	Sal log ...	52	172·021	0 12 0	do.
Do. Nagpur ...	Satin wood props ...	29,035	48372	3 4 0	sleeper
State Railway, Nagpur and Chhattisgarh	Teak sleepers ...	29,636	49337	1 12 0	do.
	Do. ...	61,956	103219	1 12 0	do.
	Saj sleepers ...	108	169	1 12 0	do.
	Sal sleepers ...	545	.....	1 12 0	do.
	Jungle wood sleepers ...	2.500	.....	2 8 0	100
	Bambus ...	500	.....	6 0 0	100
	Do. ...	151	739·320	1 12 0	do.
Wardha Coal State Railway ...	Teak slabs ...	153	278·492	1 4 0	do.
	Teak scantlings ...	703	1122·719	1 2 0	do.
	Do. ...	26	65·	1 6 0	do.
	Do. ...	143	178·746	0 12 0	do.
	Do. ...	28	124·165	1 12 0	do.
	Do. ...	4	12·516	1 8 0	do.
	Do. ...	6	133·438	3 0 0	do.
	Teak logs, round ...	1,867	4731·267	0 8 0	do.
	Gurrari props ...	28	104·709	0 12 0	do.
	Dhaora logs ...	180	126·497	0 10 0	do.
	Saj planks ...	50	.....	0 4 0	each
	Axles ...	6	.....	0 4 0	do.
	Male bambus ...	...	22814	7 0 0	100 c. ft.
Holkar Scindia and Neemuch State Rly.	Fuel ...	164	.....	0 4 0	Bambu
Commissary of Ordnance, Allahabad...	Bambus ...	1,543	.....	...	do.
	Do. ...	1	.....	3 8 0	1
Educational Department, Central Provinces ...	Teak log ...	1	.....	2 10 0	1
	Halan log ...	1	.....	1 12 0	1
	Tinus pole ...	1	.....	1 5 0	1
	Khair log ...	3	.....	0 14 0	each.
	Do. ...	2	.....	0 11 0	do.
	Khair poles ...	7	.....	0 10 0	do.
	Do. ...				
	Total ...	..		...	.....

No. 64.

CENTRAL PROVINCES.

produce sold to Public Departments from Depots during the year 1881-82.

Amount of Revenue.			Cost of Forest Department.			Comparison of Revenue and Expenditure.	
Due.	Received.	Outstanding.	Timber expenses under A1.	Quota of all other expenditure chargeable against Timber.	Total.	Surplus.	Deficit.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
22 12 6	22 12 6	.....	3 9 11	1 12 11	5 6 10	17 5 8	.....
305 8 0	305 8 0	.....	291 10 7	41 10 7	333 5 2	.....	27 13 2
1,828 11 9	1,828 11 9	.....	1,107 4 10	158 2 11	1,265 7 9	563 4 0	.....
400 9 11	400 9 11	.....	303 3 6	43 5 0	346 8 6	54 1 5	.....
24 5 6	24 5 6	.....	12 4 2	1 12 0	14 0 2	10 5 4	.....
166 4 6	166 4 6	.....	.....	.....	.....	166 4 6	.....
57 0 0	57 0 0	.....	23 12 4	.....	23 12 4	33 3 8	.....
88 14 9	88 14 9	.....	.....	.....	.....	88 14 9	.....
24 8 0	24 8 0	.....	21 11 6	3 1 7	24 13 1	.....	0 5 1
50 0 0	50 0 0	.....	34 6 2	.....	34 6 2	15 9 10	.....
107 0 4	107 0 4	.....	92 9 1	13 3 6	105 12 7	1 3 9	.....
192 4 4	.....	192 4 4	83 2 7	11 14 0	95 0 7	97 3 9	.....
1,512 1 6	.....	1,512 1 6	762 15 5	108 15 11	871 15 4	640 2 2	.....
298 8 0	.....	298 8 0	180 14 5	25 13 5	206 11 10	91 12 2	.....
123 10 0	100 10 0	23 0 0	48 12 0	.....	48 12 0	74 14 0	.....
2 4 0	2 4 0	.....	1 8 0	.....	1 8 0	0 12 0	.....
47 0 0	47 0 0	.....	14 8 6	2 2 5	16 10 11	30 5 1	.....
22 8 0	22 8 0	.....	10 15 2	1 9 0	12 8 2	9 15 10	.....
10 0 9	10 0 9	.....	.....	.....	.....	10 0 9	.....
8 7 3	8 7 3	.....	7 2 3	.....	7 2 3	1 5 0	.....
9 6 1	9 6 1	.....	6 4 0	.....	6 4 0	3 2 1	.....
1 0 0	1 0 0	.....	.....	.....	.....	1 0 0	.....
0 8 0	0 8 0	.....	.....	.....	.....	0 8 0	.....
42 8 0	42 8 0	.....	.....	.....	.....	42 8 0	.....
19 0 0	19 0 0	.....	.....	.....	.....	19 0 0	.....
38 11 6	38 11 6	.....	22 6 0	3 3 1	25 9 1	13 2 5	.....
129 0 3	129 0 3	.....	48 12 0	14 0 0	62 12 0	66 4 3	.....
94,363 12 0	94,363 12 0	.....	46,425 4 0	8,166 0 0	54,591 4 0	39,772 8 0	.....
51,863 0 0	51,863 0 0	.....	47,386 12 0	8,335 4 0	55 722 0 9	.....	3,859 0 0
1,08,423 0 0	1,08,423 0 0	.....	95,222 13 0	17,125 3 0	1,12,648 0 0	.....	4,225 0 0
189 0 0	189 0 0	.....	166 8 0	24 12 0	191 4 0	.....	2 4 0
953 12 0	953 12 0	.....	371 10 6	74 5 0	445 15 6	507 12 6	.....
62 8 0	62 8 0	.....	30 0 0	.....	30 0 0	32 8 0	.....
30 0 0	30 0 0	.....	.....	.....	.....	30 0 0	.....
1,293 12 4	1,293 12 4	.....	832 0 0	32 5 7	864 5 7	429 6 9	.....
348 1 8	348 1 8	.....	278 8 0	8 11 3	287 3 3	60 14 5	.....
1,263 0 10	1,263 0 10	.....	1,122 12 0	28 1 3	1,150 13 3	112 3 7	.....
89 6 0	89 6 0	.....	65 0 0	1 10 0	66 10 0	22 12 0	.....
134 0 11	134 0 11	.....	178 12 0	4 8 0	183 4 0	.....	49 3 1
217 4 8	217 4 8	.....	124 2 0	3 2 3	127 4 3	90 0 5	.....
18 12 5	18 12 5	.....	12 8 0	0 5 0	12 13 0	5 15 5	.....
400 5 0	400 5 0	.....	198 8 0	5 0 0	203 8 0	196 13 0	.....
2,365 9 11	2,365 9 11	.....	1,204 2 6	336 0 0	1,540 2 6	825 7 5	.....
78 8 6	78 8 6	.....	14 9 9	4 3 0	18 12 9	59 11 9	.....
75 4 11	75 4 11	.....	68 1 0	1 11 3	69 12 3	5 8 8	.....
12 8 0	12 8 0	.....	5 0 0	1 6 0	6 6 0	6 2 0	.....
1 8 0	1 8 0	.....	0 1 6	.....	0 1 6	1 6 6	.....
1,596 15 8	1,596 15 8	.....	.....	.....	.....	1,596 15 8	.....
41 0 0	41 0 0	.....	12 9 6	.....	12 9 6	28 6 6	.....
55 5 3	55 5 3	.....	26 14 0	.....	26 14 0	28 7 3	.....
3 8 0	3 8 0	.....	.....	.....	.....	.....	.....
2 10 0	2 10 0	.....	.....	.....	.....	.....	.....
1 12 0	1 12 0	.....	.....	.....	.....	.....	.....
1 5 0	1 5 0	.....	3 12 0	8 12 0	12 8 0	5 1 0	.....
2 10 0	2 10 0	.....	.....	.....	.....	.....	.....
1 6 0	1 6 0	.....	.....	.....	.....	.....	.....
4 6 0	4 6 0	.....	.....	.....	.....	.....	.....
2,69,426 10 0	2,67,400 12 2	2,025 13 10	1,96,828 0 2	34,891 13 11	2,31,719 14 1	45,870 5 3	8,163 9 4
				Deduct deficit ..		8,163 9 4	
				Balance for the Department ...		37,706 11 11	

FORM No. 65.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Abstract showing the value of timber and other produce at sale depots for the year 1881-82.

Description of timber and other produce.	On hand at the commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	Cubic ft.	Value.	No.	Cubic ft.	Value.	In favour of the year.	Against the year.	
			Rs.			Rs.			
Logs round ... Teak ...	2225	30,594	24,718	1,994	26,383	16,604			
Logs round ... Sal ...	131	5,385	2,693	..	...	...			
Logs squared ... Teak ...	164	2,390	2,390	145	2,112	2,112			
Logs squared ... Sal ...	15	147	147	...	...	...			
Logs other than Teak and Sal ...	23	256	160	198	344	172			
Teak scantlings ...	20,778	23,910	14,944	16,662	19,450	10,939			
Sal scantlings ...	...	...	...	139	158	79			
Sleepers ... Teak ...	111	386	277	...	...	...			
Sleepers ... Sal ...	4,002	9,503	8,020	3,690	5,975	4,613			
Sleepers other than Teak and Sal ...	1	3	...	31	46	15			
Teak slabs ...	1,109	4,438	2,773	913	3,398	2,124			
Teak planks ...	35	23	23	190	20	20			
Planks other than Teak and Sal ...	...	...	...	3,635	1,317	823			
Sal pieces marketable ...	1	...	...						
Pieces marketable other than Teak and Sal ...	959	...	198	3	...	1			
Teak poles ...	175	...	119	2,637	...	656			
Poles other than Teak and Sal ...	5,216	...	80	264	...	86			
Boats ...	9	...	45	4,271	...	218			
				8	...	40			
Total ...	3,4954	77,035	56,587	34,780	59,203	38,502		18,085	

				Rs.					
Fuel, pieces	...	2	...	...	...	...	...		
Fuel, maunds	...	...	...	...	192	...	64		
Charcoal, maunds	...	...	...	...	19	...	24		
Total	...	2	...	...	211	...	88	85	...
Bambus	...	2,090	...	188	13,480	...	2,126		
Total	...	2,090	...	188	13,480	...	2,126	1,938	...
Honey, maunds	...	9	...	191	5	...	54		
Bhibas, maunds	...	1	...	1	2	...	2		
Gum, maunds	...	1	...	2	2	...	8		
Ropes	...	10	...	...	...	...	...		
Grass, pullas	...	70,275	...	560	2,93,143	...	2,624		
Kossa	...	...	...	...	35	...	...		
Lac, maunds	...	...	...	...	2	...	20		
Grain, maunds	...	...	...	...	4	...	8		
Total	...	70,296	...	754	2,93,193	...	2,716	1,962	...
Grand Total	...	1,07,342	77,035	57,529	3,41,664	59,203	43,432	3,988	18,085
Elephants	...	6	...	4,501	6	...	4,051		
Other live stock	...	230	...	2,651	188	...	2,896		
Machinery	...	...	..	23,171	...	...	20,854		
Other dead stock	...	...	...	24,745	...	...	22,359		
Total	...	236	...	55,068	194	...	50,160	...	4,905
Grand Total	..	1,07,578	77,035	1,12,597	3,41,858	59,203	93,592	3,988	22,993

Net difference against the year, Rs. 19,005

Forest Department, Central Provinces.

Statement of Forest Buildings in the Central Provinces, costing over Rs. 200 each at the close of 1881-82.

Division.	Situation.	Description of buildings.	Original cost. Of buildings on hand at commencement of the year.	Original cost. Of buildings constructed during the year.	Cost of repairs during the year.	Rent realised in 1881-82.	Remarks.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Mandla ...	Khitoli ...	Rest-house 1 room and veranda Kutcha brick walls ...	400 0 0	.....	2 15 9	.....	
Hoshangabad ...	Head Quarters .	Small pucca bungalow ...	2,094 0 0	.....	59 12 0	171 0 0	For portion of the building.
Nimar ...	Do.	Do. Do.	4,054 0 0	.....	.....	192 0 0	
Do. ...	Punassa ...	Pucca rest-house ...	626 0 0	.....	.....	.....	
Do. ...	Kirgaon ...	Do. Do.	.....	826 0 0	.....	.....	
Chanda ...	Chanda Civil Station ...	Terrace roof bungalow ...	8,000 0 0	.....	229 0 8	488 6 4	For portion of the building.
Do. ...	Mohurli ...	Rest-house ...	500 0 0	.....	18 9 0	.....	
Do. ...	Allapilli ...	Do.	300 0 0	.....	45 14 5	.....	
Seoni ...	Korai ...	Small pucca Inspection Bungalow	1,000 0 0	.....	30 3 0	.....	
Saugor ...	Garhakota ...	Pucca Inspection Bungalow ...	1,000 0 0	.....	50 12 6	.....	

No. 4442/247

FROM

A. H. L. FRASER, ESQUIRE, C. S.

(OFFG. SECY. TO THE CHIEF COMMISSIONER,

Central Provinces.

To

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpur, the 6th October 1883.

SIR,

I am directed to acknowledge receipt of your letter No. B. 88, dated 17th ultimo. I am to express the Chief Commissioner's great regret that this report which should have been submitted to him by the 15th of August has only been received on the 1st instant At the end of your report you give some explanation of this delay. Your having quite recently taken over charge of your office affords some excuse for it; but it is mainly due to defects in Divisional and District offices, for which the Conservator must be held responsible. You promise soon to submit proposals which you think will if accepted remedy these defects and obviate future unpunctuality. The Chief Commissioner awaits these proposals.

Forest area.

2. The following table shows the acreage of the different classes of forests at the disposal of Government on 1st April last as compared with that on 1st April 1882:—

Forests.	On 1st April 1882.	Added during 1882-83.	Excluded during 1882-83.	Remaining on 1st April 1883.
First class reserves ...	16,56,241	2,994	...	16,59,235
Second class reserves ...	107,78,573	30	2,889	107,75,714
Unreserved forests ...	1,85,070	20,646	2,368	2,03,348

The differences in area shown above are explained in paragraphs 3—6 of your report. The only matter calling for notice here is the transfer of 2,880 acres from the second to the first class reserves in the Hoshangabad Division. In your seventh paragraph you point out that since the close of the year a similar transfer of 5,312 acres in the Jubbulpore district has taken place; and another transfer of 10,870 acres in the Nimar Division is imminent. The importance of this matter was insisted on in the twelfth paragraph of my letter No. 3521-201, reviewing last year's report; and the Government of India also invited earnest attention to this matter. The Chief Commissioner can hardly say that he is satisfied with what has been done in this direction during the year under report; and he must insist on more vigorous action being taken.

3. In a very valuable report on the Forest administration of this Province which has just been received from the Government of India, Dr. Schlich, the Inspector General of Forests, enters very fully into the question of the management of the Reserved Forests. He advocates the removal of all distinction

between first and second class reserves, and closing a certain proportion of the area in rotation. This view will receive the fullest consideration from the Chief Commissioner. But whatever the decision on that point may be, the necessity for closing a certain portion of the area of the present second class reserves is very urgent. It matters not whether this portion is called "first class reserves" or "closed reserves:" the important matter is to realize and act on the necessity for husbanding existing resources which Dr. Schlich so clearly demonstrates.

Boundaries.

4. In the first class reserves, with the exception of some work that remains to be done in the Mandla and Nimar Divisions, the boundaries are reported to be in a satisfactory condition. The boundary lines are kept clear of all growth; and the boundary marks, in good order. In the second class reserves "the "work of demarcating boundaries has as yet made but little progress". Some work has been done; but I am to invite your attention to Dr. Schlich's remark, that "it is necessary that during the next few years all the available strength "of the Department should be concentrated on this work, so as to bring it to an "early conclusion". The Chief Commissioner had already had his attention drawn to this matter, and has now under consideration schemes for the demarcation of boundaries in several districts. He hopes not only to see your department display great energy in this respect during the current year, but also to be able to place at your disposal such assistance on the part of district officers as may be necessary; for almost the whole staff of the Commission will be on duty during next cold weather.

Establishment.

5. The Chief Commissioner does not propose to make here any observations regarding establishment, as he intends to consider that matter fully in connection with Dr. Schlich's report, and to pass orders on it as soon as possible. The urgent necessity for taking measures for protecting the forests of Chhattisgarh towards which the Railway is so rapidly approaching will probably call for an increase in the superior staff of the Province. On this, however, orders must issue separately hereafter.

General protection.

6. Regarding general protection Dr. Schlich says, "The general protection "of the forests appears to be all that can be desired. Damage by illegal or irregular cutting occurs very rarely. "Of course the restrictions against cutting in the second "class reserves refers, as a rule, only to a few species of trees; but even in the "first class reserves, where cuttings are in many cases prohibited altogether, no "damage seems to occur. From these facts it may be concluded that the conservancy rules which have been enforced up to date are reasonable, and that "they have not inconvenienced the people in any material way". Your report shows that during 1882-83 it was found necessary to prosecute only 57 persons in 30 cases relating to the first class reserves, and 1,245 persons in 633 cases relating to the second class reserves. Of the former 53 persons in 26 cases, and of the latter 1,046 in 549 cases were convicted. These figures are generally satisfactory.

Protection from fire.

7. The area under protection from fire was 9,12,927 acres. Of this area 8,68,273 acres were of first class reserves and 44,654 of second class reserves. The former were protected at an average cost of Rs. 11-0-5 per square mile; the latter at an average cost of Rs. 15-3-11. The former were on the whole successfully protected; for fire spread over only 14,291 acres; the latter were much less successfully protected, for 8,668 acres or nearly 20 per cent of the whole protected area was burned. The results in the case of the latter are not satisfactory. The Chief Commissioner would be glad to know more of the principle on which these second class reserves are protected, and how that expensive protection is expected to succeed if cattle-grazing is allowed, as seems to be indicated by the remark made in your ninety-third paragraph to the effect that "the Gaolies caused the fire to obtain a better crop of grass." He observes from your ninety-fifth paragraph that cattle are not allowed to enter first class reserves under protection from fire; and it seems to him useless to spend money in protecting from fire forests in which cattle-

grazing is allowed. The necessity of making protection from fire efficient rather than extensive has been frequently insisted on; and I am to invite your attention to this matter. It is gratifying to the Chief Commissioner to find that Dr. Schlich's report corroborates the view stated by Sir John Morris in reviewing last year's report, that the results of our system of protection from fire have been far from insignificant; at the same time no effort should be spared to make that system still more widely successful.

Cultural operations.

8. The cultural operations of the year have not been extensive. The renewal of the forests is, and must be, the Chief Commissioner feels strongly, chiefly effected by protection against fire and grazing; sowing and planting must be quite subsidiary and exceptional operations. They have not been wholly neglected; but you do not show whether the following suggestion thrown out by the Government of India in reviewing last year's report has received attention. "It appears to His Excellency in "Council worthy of consideration whether the success of fire protection would "not in many instances be increased by planting up areas now covered with grass "at or near the boundaries of the protected blocks, where a sufficient number of "seed-bearing trees is not available. If in these cases the re-stocking is left to "nature, very long periods must ordinarily elapse before any appreciable good "can be effected; and the planting of strips with suitable trees appears a mea-"sure which might well be considered by the Forest Department." I am to commend to your consideration this suggestion which Dr. Schlich repeats. In regard to any other experimental or cultural operations I am to say that concentration of effort must be insisted on; for the forests cover so large an area that failure must otherwise ensue.

Departmental operations.

9. Your account of the direct operations of the department is somewhat wanting in clearness. In last year's report they were shown very clearly in accordance with the orders of Government. It would seem that real departmental working is practically confined to the Banjar Forest (Mandla) and the Ahiri Forest (Chanda): operations elsewhere are of a trifling character The results may apparently be thus shown, though the Chief Commissioner does not quite understand how the figures in paragraphs 133 to 157 are to be reconciled with those in Annual Form No. 57 appended to the report:—

1st Class Reserves.	Charges.	Income
Mandla	Rs. 14,224	Rs. 32,433
Chanda	„ 32,580	„ 27,418
Six other divisions	„ 3,412	„ 5,706
Total ...	Rs. 50,216	Rs. 65,557

2nd Class Reserves.	Charges.	Income.
Wardha	Rs. 1,617	Rs. 4,857
Mandla	„ 1,116	„ 3,028
All other districts	„ 762	„ 1,620
	Rs. 3,495	Rs. 9,505
Grand Total ...	Rs. 53,711	Rs. 75,062

These operations are not important and are only fairly successful. It would appear that your predecessor's sanguine expectations of the results of the year have not been realized, and the *resumé* of the results of departmental operations given by Dr. Schlich does not, so far as the Chief Commissioner can judge, afford evidence of the efficiency of the officers of the department as timber merchants: that is, in the part of their duties which makes the greatest call on their administrative capacity.

But the Chief Commissioner sees no reason to doubt that with the experience that has been gained clear success in the conduct of timber operations will be attained, or to question the policy which has been pursued. The opening

between first and second class reserves, and closing a certain proportion of the area in rotation. This view will receive the fullest consideration from the Chief Commissioner. But whatever the decision on that point may be, the necessity for closing a certain portion of the area of the present second class reserves is very urgent. It matters not whether this portion is called "first class reserves" or "closed reserves:" the important matter is to realize and act on the necessity for husbanding existing resources which Dr. Schlich so clearly demonstrates.

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But the Chief Commissioner sees no reason to doubt that with the experience that has been gained clear success in the conduct of timber operations will be attained, or to question the policy which has been pursued. The opening

of communications with Mandla, the certain extension of the Chhattisgarh Railway, and the very probable opening of Railway communication with the South *viâ* Chanda, are among the causes which must develop the resources of the department and vindicate the policy of conservation. The time for extensive operations has not yet come. The purchase from the Ahiri Zamindar of the forest lands adjoining the Birmarum and Mirkalloo reserves, sanctioned by the Government of India in May last, will no doubt prove financially successful as well as a benefit to the country in the future.

Financial results.

10. The financial results of the department are, on the whole, far from unsatisfactory. Passing from the direct operations of the department, the other sources of revenue are very considerable, *e. g.* the grazing dues, payments for produce removed by the people themselves, &c. These other revenues may be thus shown—

	Charges.	Income.
1st Class reserves	... Rs. 39,971	Rs. 1,21,574
2nd Class reserves	... „ 1,81,291	„ 7,81,011
Total	... Rs. 2,21,262	Rs. 9,02,585

To these figures must be added the charges for formation, improvement and protection of forests. And the total income and charges of the year under report may then be thus compared with those for 1881-82 :—

	Receipts.		Charges.		Surplus.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1st class reserves ...	4,14,325	1,87,130	2,72,002	1,78,879	1,42,321	8,251
2nd class reserves	7,58,560	7,90.517	2,25,011	2,33,369	5,33,549	5,57,148
Total ..	11,72,865	9,77,647	4,97,013	4,12,248	6,75,870	5,65,399

In respect to the charges it must be borne in mind that Rs. 1,37,275 (out of the Rs. 4,12,248) were spent on "formation, protection and improvements of forests" from which no direct return is at present received, and the proportion of which to the total will *cæteris paribus* decrease in future.

11. In future reports the Chief Commissioner would like to have some quite brief notice of cases in which there has been misconduct on the part of subordinates of the department, and he will be glad if you will consider whether the report could be made in some parts a more accurate reflex of the system of Forest administration. Mr. Jones' meaning will be apparent when you turn to Dr. Schlich's report. In that the various systems which are in force in second class reserves are minutely described, but we may read all through your report without knowing whether for instance the commutation or licensing systems are working well or the reverse, or indeed without learning that these or any other systems of management obtain. The Chief Commissioner is aware that Forest reports are prepared on a plan which is more or less uniform for all

India, but still he imagines that it may be possible to introduce paragraphs containing the special information which he desires to see. And he proposes also to consult you on the point whether some of the long appendices to your report might not be compressed and the space they occupy devoted to Provincial Statements designed to illustrate the system on which Forest administration is actually carried on in second class reserves.

Form No. 63 is the one in which the Chief Commissioner is most interested and he feels sure that it at all events might with a little alteration be made to tell its story much more clearly than it does now.

12. In conclusion, I am to thank you for your report, and to acknowledge the services rendered by Colonel Doveton during the year. Your own good work as Deputy Conservator leads the Chief Commissioner to expect that your tenure of the office of Conservator will be successful. The Chief Commissioner concurs in your commendation of the work of the department generally.

I have the honor to be,

Sir,

Your most obedient Servant,

A. H. L. FRASER,

Offg. Secretary.

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No. B-88 of 1883-84.

FROM

R. H. E. THOMPSON, ESQUIRE,

OFFG. CONSERVATOR OF FORESTS,

Central Provinces,

To

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpur, the 17th September 1883.

SIR,

I have the honor herewith to forward the Report on Forest administration for the past year, together with the prescribed Annual Statements.

I have the honor to be,

Sir,

Your most obedient Servant,

R. H. E. THOMPSON,

Offg. Conservator of Forests,

Central Provinces.

Progress Report of Forest administration in the Central Provinces,

FOR THE YEAR 1882-83,

BY R. H. E. THOMPSON, Esquire,

Offg. Conservator of Forests, C. P.

CHAPTER I.

Area and Boundaries.

Areas—General.

The total area of Government forest lands with which the Forest Department is concerned stood as follows on 1st April 1883 :—

		Acres.
1st Class reserves	...	1,659,235
2nd Class reserves	...	10,775,714
Unreserved forests	...	203,348
Total area	...	12,638,297

2. The following table compares areas, as they stood on 1st April 18 82 with those remaining on 1st April 1883 :—

Forests.		One 1st April 1882.	Added during 1882-83.	Excluded during 1882-83.	Remaining on 1st April 1883.
		Acres.	Acres.	Acres.	Acres.
1st Class reserves	...	1,656,241	2,994	.....	1,659,235
2nd Class reserves	...	10,778,573	30	2,889	10,775,714
Unresved forests	...	185,070	20,646	2,368	203,348

1st Class Reserves.

3. The area of 1st class reserves was increased by 2,994 acres, thus :—

Transferred from 2nd class to the 1st class reserve of Saonligarh in the Hoshangabad division 2,880 acres, as per letter No. 1285-70, dated 30th March 1883, from the Secretary to the Chief Commissioner, Central Provinces.

114 acres which the Forest Department purchased in the Moharli reserve, known as the village land of Janona, was declared a reserved forest from 1st November 1882, *vide* Central Provinces' Gazette Notification No. 3657, dated 25th September 1882.

2nd Class Reserves.

4. The nominal increase of 30 acres in the 2nd class reserves is due to the correction of error in the total of figures previously returned as the area of 2nd class reserves in the Betul Division. The decrease of 2,889 acres is explained as follows :—

2,880 acres transferred to 1st class reserves in the Hoshangabad division as already noted.
9 acres as the result of correction of error in the total of figures given for past year.

Unreserved Forests.

5. The increase by 20,646 acres took place in the divisions of Balaghat, Damoh and Chhindwara, and is explained as follows :—

In the Balaghat division the increase has been 17,730 acres, thus—

Received from one Bisram Patel 629 acres in exchange for 100 acres, *vide* Chief Commissioner's letter No. 2718-142, dated 2nd July 1882.

Acquired by purchase 3,837 acres, *vide* Chief Commissioner's letter No. 2070-110, dated 14th June 1882, and by resumption by Government of 29 ten-year villages 13,264 acres.

In the Damoh division 184 acres were received in exchange for an area of equal extent given up to a Malguzar, *vide* Chief Commissioner's letters Nos. 1242-54 and 2527-136, dated respectively 13th April and 12th July 1882.

In the Chhindwara division were resumed 2,732 acres of forest land, the right to which had reverted to Government.

The decrease in these forests has been as follows :—

2,368 acres are shown as having been excluded from these forests, namely—
114 acres transferred to Moharli Sub-division as reserved forest, which transfer has already been explained.

184 acres given in exchange to a Malguzar as already explained, and in Balaghat a decrease of 2,070 acres is reported to have been thus effected.

100 acres given in exchange to Bisram Patel, and 1,970 acres leased out for cultivation.

6. It will already have been observed that during the year the following transfers were made from 2nd to 1st class reserves :—

Hoshangabad Division.

			Acres.
Saonligarh	...	...	2,880
	Chanda Division.		
Moharli	...	...	114
	Total acres	...	2,994

7. Since the close of the year the following transfer has taken place in the Jubbulpore district, viz. :—Forest block No. 66, measuring 5,312 acres; and in the Nimar Division, 6 blocks aggregating 10,870 acres are now ready for transfer, the orders for which will shortly be obtained. In regard to the exten-

sion of 1st class reserves in other districts, the question is well before Forest officers, and it is expected that by the end of the current year considerable progress will have been attained in this respect.

BOUNDARIES—RESERVED FORESTS.

FIRST CLASS RESERVES.

General.

8. In the 1st class reserves, with the two following exceptions, the boundary lines were maintained clear of all growth, and the boundary marks, with some few trivial exceptions, were kept up in good order during the year.

The above exceptions to the full maintenance of boundary lines refer to the divisions of Mandla and Nimar.

Mandla Division.

9. The exception in this division applies only to two reserves; in all the remaining reserves both boundary lines and boundary marks were maintained in good order.

Lower Gour reserve.

In the Lower Gour forests demarcation has not yet been completed, and this is reported as being due to the difficulty in following the precise boundary of this reserve where it marches with the adjoining malguzari lands. The Divisional Officer, however, will now be instructed to use his best endeavours to have this work completed during the ensuing open season.

Singrampur reserve.

10. In the Singrampur reserve it is reported that there are 14 boundary pillars which require to be repaired. The necessary repairs will be undertaken during the ensuing open season.

Nimar Division.

11. The Divisional Officer of Nimar's general summing up of the state of boundaries in his division is as follows:—

The boundaries of reserves in the division are defined by a cleared line, which is almost everywhere distinct. Steps are now being taken in Punassa to put up ridge and trench marks which will be properly numbered. The boundary of the Khandwa reserve is so very incorrect that it cannot be defined on the ground, and until necessary corrections are made nothing can be done to cut and clear the line.

12. The following details show more clearly the exact state of forest boundaries in this division:—

Kalibheet reserve.

The boundary line in the Kalibheet reserve is reported clear and free from undergrowth. It has not, however, been measured, nor have the boundary marks yet been numbered.

Punassa reserve.

In the Punassa reserve the boundary lines is kept clear, except near Chandel, where it is disputed ot one or two points. It is, however, proposed to re-survey and check the boundary at the disputed points during the present season.

Chandgarh reserve.

The boundary line of the Chandgarh reserve is reported clear and well defined, but no numbered boundary marks have yet been put up.

Khandwa reserve.

As regards the Khandwa reserve the following remarks find place in the Divisional Officer's report :—

"The boundaries of the Khandwa reserve are in very bad condition. There is scarcely a single village boundary correct, and the errors consist not only in more or less land having been included in the reserve than should have been, but in actually incorrect survey at the settlement whereby adjoining village *shajras* will not fit into one another. Under these circumstances it was impossible to cut or clear a (boundary) line this year or until the mistakes have been corrected."

It is reported that during the year 1882-83, 96 miles, 6 furlongs and 7 chains of boundaries of 1st class reserves were cut and surveyed.

13. It must not be understood, from the remarks made in connection with the subject of boundaries in the Nimar division, that little has been done there during the past year in surveying and demarcating boundaries. The work of surveying and demarcation has been carried on vigorously, but principally in the 2nd class reserves, more with the view to the immediate final transfer to the 1st class of several of the more important forests of the 2nd class.

Tabular statement of forest boundaries.

14. With reference to paragraph 3 of Chief Commissioner's review of last year's report, it has again been found impossible to furnish with this report the tabular statement showing what part of the boundary of each reserve is in good order, and what portion remains to be cleared. Though the information was called for and returns were furinshed by Divisional officers, yet the majority of these returns are found so manifestly incorrect as to the length of boundary given, that the figures cannot be accepted as they stand without further proof by re-measurement, which has now been ordered to be made.

SECOND CLASS RESERVES.

General.

15. In the 2nd class reserves the work of demarcating boundaries of forest areas has as yet made little progress. The following summing up will indicate the state of progress made up to the close of the year.

16. In 6 districts, namely, Nagpur, Bhandara, Balaghat, Hoshangabad, Raipur and Bilaspur absolutely nothing yet has been done to put the boundaries of the Government forests on a satisfactory footing. Attempts have been made in one or two of these districts to have the boundary lines surveyed, but owing to the change of Forest officer and difficulties arising from disputes little or nothing has been done. In 9 other districts, namely Wardha, Chanda, Jubbulpore, Mandla, Nimar, Damoh, Narsinghpur, Chhindwara and Sambalpur, some progress has been made; but there still remains much to be done in them, except in Nimar, where considerable progress has already been made. From Sambalpur and Chhindwara it is reported that work previously done is now to some extent found to be unsatisfactory, and therefore some of it will have to be done over again. In the remaining 3 districts, namely Saugor, Seoni and Betul, the boundaries are reported as well defined and are maintained in good order.

17. The necessary temporary establishment of Native Surveyors already has been sanctioned by the Chief Commissioner for all districts which have applied for such sanction. In these Provinces, however, qualified Native Surveyors are so difficult to obtain, that it has been found impossible to get even four or five men, possessing the required qualifications, to fill appointments which are at present vacant.

18. The following remarks refer to the condition of forest boundaries, and to the reported progress made in the work of checking and demarcating them, in each of the 18 districts comprising the Central Provinces.

19. Under the direction of the Forest officer an attempt was made during the year to survey and mark the boundaries of the 2nd class reserves in this district. The work, however, could not be carried out, because it became apparent, after the field was taken, that the Native Surveyor was not sufficiently skilled to be trusted, and it was found impossible for the Forest officer himself to supervise the preliminary details of line cutting, since he had other duties to perform.

Nagpur.

20. Nothing has been done here. The appointment of a temporary surveyor was sanctioned, but a qualified surveyor who could carry on efficiently the preliminary work independent of supervision has not yet been found.

Bhandara.

21. The boundaries of the two forest blocks known as Erjarh and Dhuga, which were demarcated some years ago, were cleared and maintained in good order during the year. The Forest officer did also the checking of boundaries in some of the other 2nd class reserves, but no satisfactory progress was made by him, owing to disputes cropping up which had to be referred for the orders of the Deputy Commissioner.

Wardha.

22. The boundaries of most of the Government forests in the tahsils of Mul and Warora have been checked, and some of them demarcated by cleared lines which are from 10 to 20 feet in width, according to the nature of the forest growth through which they are carried. In the case of 38 private estates whose boundaries march with those of the Government forests, written acknowledgments have been taken from the malguzars that their boundaries, as now defined, are correct.

Chanda.

23. With exception of the Pandratola reserve, no other forest has been demarcated in this district. Last open season a Forest officer was deputed to examine the Government forests in Balaghat, and to report on their present condition and capabilities, with the view to extension of 1st class reserves in that direction. This officer shortly afterwards fell ill with a severe attack of fever, and the work consequently came to a stop before anything was done. The Deputy Commissioner of Balaghat report that settlement and demarcation of forest boundaries are most urgent necessities in his district, because there are no maps, and no boundary marks to private estates, since none were laid down at the Settlement

Balaghat.

24. The Deputy Commissioner report may be summed up as follows :—

Jubbulpore.

That a surveyor on Rs. 30 per mensem and 2 chain-men on Rs. 5 per mensem have been entertained. That work commenced on 24th January, and that the boundaries of 4 chucks out of 83 blocks into which the forests of his district are divided were marked off. The Deputy Commissioner hopes to make good progress in this work in future, He furnishes no other information on the subject.

25. The boundaries of all the second class forests have been demarcated. The boundary lines are kept up clear and well defined. The maintenance of boundary marks is reported as being attended to.

Saugor.

26. The services of a practical surveyor have been secured, who commenced work in December last on the forest boundaries in the Damoh tahsil. He has since completed the survey of 17 blocks, the boundaries of which will shortly be demarcated. The cost of demarcation is estimated at about Rs. 100 for the 17 forest blocks in question.

Damoh.

27. The boundaries of 2nd class reserves in this district have already been satisfactorily defined, and are moreover maintained clear of growth by proprietors of adjoining estates, who are allowed to remove, free of cost, whatever comes off the lines during the annual clearings.

Seoni.

28. The maintenance of old settlement boundary marks is reported as being kept up, but the detailed survey of forest boundaries has only just been taken in hand. The Deputy Commissioner reports having secured the services of a qualified Native Surveyor who will be assisted by a sharp Amin. No report has been received as to the amount of work done, beyond the general statement that "certain forest blocks have been demarcated"

Mandla.

29. The Divisional Forest officer reports, and his report is concurred in by the Deputy Commissioner, that the boundaries of the 2nd class reserves are not in a satisfactory state, and that arrangements are being made to improve them.

Hoshangabad.

30. The following is quoted from the Divisional Forest officer's report. Mr. Foster writes :—

Nimar.

"The work of correcting the boundaries has gone on uninterrupted during the dry season. The method of working eventually adopted was that a member of the Forest department, in this case Mr. Anthony, Assistant Conservator, should go over the boundaries of the villages marching with the forests, and report whether any discrepancy existed between the shajra and the boundary as actually existing on the ground. If discrepancy was found it was reported to the Deputy Commissioner, who with the aid of patwaris and kanungoes, corrected the error, and finally the Forest department again checked the corrected boundary. As a matter of fact the preliminary report by the Forest department was not always required, since in many cases the Deputy Commissioner took up the work of correcting the boundaries of a forest in anticipation of the forest officer's visit thereto."

31. The progress made during the year in correcting, surveying, and mapping boundaries will be seen by the following summary :—

1. Correction of boundaries, under the orders of the Deputy Commissioner, was completed, except the following :—

The boundaries of the three 1st class reserves (except Khandwa, which is in course of being corrected.)

The boundaries of Dhamangaon, Bhamgarh, Piplod, } 2nd class reserves.

2. The Forest department completed the following work :—

		No. of Mauzas.	No. of miles of boundaries.
Boundaries surveyed and mapped	...	112	$189\frac{7}{8}$
Boundaries merely checked	...	36	...
Boundaries finally checked	...	...	$2\frac{6}{8}$

32. The principal work fell on Mr. Anthony, Officiating Assistant Conservator of Forests. Mr. Fowler, Assistant Conservator, was withdrawn for other duties after he had done only 3 mauzas in the Asir pargana.

33. The work has made considerable progress in this district. The Deputy Commissioner has greatly aided in bringing about this satisfactory state of things.

34. From this district the Divisional Forest officer reports that the question of boundaries has now been settled, the boundaries have all been laid out and marked on the ground in a proper manner.

Betul.

35. A commencement to correct and survey boundaries was made during the year, but the Deputy Commissioner's report is silent as to progress. The following is quoted from this officer's report :—

Narsinghpur.

"From as early a time in the autumn as it was safe to send men into the junglee I have had two surveyors at work preparing all necessary information and measurs-

ments for the determination of the boundary line of the Government forest against the malguzari limits, a work which was not done at the Settlement. Our Settlement village maps have not marked on them the boundary lines, consequently the work is troublesome and will take much time, and in the ensuing year the personal superintendence of the Deputy Commissioner or one of his Assistants will have to be devoted to this work."

Chhindwara.

36. The Deputy Commissioner reports that very little progress has been made, owing to the forests being unhealthy and the surveyor falling sick. Progress particularly was slow in the Sousur tahsil. He also expresses the opinion that the work of demarcation carried out during the past 4 years has not been entirely satisfactory, except in cases where there were disputes, and Amins were appointed to lay down the correct boundaries. The Deputy Commissioner also records that it is clear to him that the demarcation work of this district will not be completed in two years, or anything like it.

Chhattisgarh Division.

37. In the Raipur and Bilaspur districts nothing in the way of demarcation has been attempted. In Sambalpur the forests were demarcated during the last revenue Settlement, but the work was carried out in a manner which has left much that was desirable unfinished. In fact the Deputy Commissioner is of opinion, and the Officiating Conservator can corroborate this opinion from personal observation, that much of the demarcation work was scamped, the Settlement officer in this case having entrusted this important work to the Settlement Superintendent, who carried it out without maps of any description, or any fixed marks on the ground to guide him. It is of the utmost importance, in view of the increasing value of the forests in this district, that a careful survey of forests boundaries be made, and be followed up by final demarcation.

CHAPTER II.

Surveys, Working plans and Annual plans of Operations.

38. No information to record.

CHAPTER III.

Protection and Improvement.

(1.)—*Establishment.*

39. The sanctioned scale of Gazetted officers, on 1st April 1882, stood as follows :—

Deputy Conservators	...	...	6
Assistant Conservators	...	...	6
Sub-Assistant Conservators	...	...	4
		Total officers ...	16

But the revised scale sanctioned from 3rd September 1882 for the Central Provinces and Berar fixed the number and graded proportion of officers as follows :—

Deputy Conservators	...	...	10
Assistant Conservators	...	...	7
Sub-Assistant Conservators	...	...	4

Total officers 21, of which

4 Deputy, Assistant, and Sub-Assistant Conservators are attached to Berar, leaving 17 officers for the Central Provinces.

At the close of the year under review, Forest officers of the following grades were present in the Central Provinces.

Deputy Conservators	...	...	8
Assistant Conservators	...	..	4
Sub-Assistant Conservators	...	...	2
	Total officers	...	14

One of the junior officers, Mr. Chunder Kumar Chhatterjee, was promoted during the year to Sub-Assistant Conservator after he had completed his two years' course at the Forest school Dehra, and obtained the necessary certificate entitling him to promotion to the superior grade.

40. The sanctioned allotment for the Conservancy Establishment is Rs. 45,264, and the sanctioned scale is as follows :—

		Average salary.	No.
Forest Rangers on	Rs.	67	22
Foresters on	"	23	39
Forest guards on	"	8	168

This establishment was divided as follows between 1st and 2nd class reserves :—

		1st class.	2nd class.
Forest Rangers	...	11	11
Foresters	...	35	4
Forest guards	...	143	25

41. A temporary establishment supplementary to the above was sanctioned at a cost of Rs. 1,42,520 : of this amount Rs. 13,420 was sanctioned on account of 1st class reserves and Rs. 1,29,100 on account of 2nd class reserves.

42. In neither case has the expenditure on this establishment equalled the cost as per sanctioned scale.

43. With one or two trivial exceptions District and Forest officers report themselves satisfied with the strength and efficiency of their respective forest establishments.

(2).—*General protection and breaches of the Forest law.*

General protection.

44. In the 1st class reserves certain protective restrictions are in force, which apply to all reserved trees, as well as to some of the more valuable species of the unreserved kinds, and which restrictions exempt such trees being felled except under departmental supervision. The only descriptions of produce that can be collected and removed from 1st class reserves by consumers and purchasers, under fixed rates of payment, are therefore the inferior species which yield small building wood, and wood required for agricultural purposes, bamboos, dead wood, fuel, grass, and other minor forest produce. Similar protective restrictions have been applied from time to time to certain blocks of forests in the 2nd class reserves, with the view to giving the forests rest, and thus to improve their general condition. Under the details given for each district in last year's report will be found a record of what had been done in this way up to the end of the year 1881-82. It is therefore only necessary now to add to this record the details of what was done during the year 1882-83, and to state in general terms that the forests thus placed under protective restrictions still continue to be protected.

45. The work done was in the two following divisions.

During the year under report, 17 blocks aggregating 22,736 acres were placed under protection in the Wardha division. And in Balaghat the following areas aggregating 27 square miles were added to the areas referred to in paragraph 204 of last year's report:—

I.—Blocks of forests in the plains of the Lanjee pargana	20	square miles.
II.—The forests lying between the Polda river and the Bansabhar	4	ditto.
III.—Junewani forests of the Behir Taluk ...	3	ditto.
Total ...	27	

In no other division was this work carried out. Deputy Commissioners and Forest officers have reported favourably on the improved condition now presented by these protected forests; on the whole it may be accepted that restrictive measures of the kind now in force have done much good towards helping the forest growth, at no other cost than that of the protective establishment required to watch.

Forest Offences.

General.

46. In the 1st class reserves 498 cases of breaches of Forest rules were reported. In 30 cases only, involving 57 persons, was prosecution resorted to. In 26 cases the conviction of 53 persons was obtained. One case was pending at the close of the year, and in 467 cases 880 persons concerned were allowed to compound. According to the returns of the 2nd class reserves, 9,059 cases were reported involving 18,019 persons. In 603 cases 1,228 persons were prosecuted, and in 523 cases 993 persons were convicted. Two cases were pending at the close of the year. In the remaining 8,454 cases the persons concerned were allowed to compound. To admit of comparison, the figures showing the numbers of prosecutions and convictions for the past two years are given below:—

Year.	Prosecutions.		Convictions.		Percentage of convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1881-82	798	1,242	734	1,079	91·9	86·9
1882-83	633	1,245	549	1,046	86·7	81·4

47. It will be seen from the above Statement that a larger number of persons were prosecuted against whom fewer convictions were obtained than during the year 1881-82; the percentage of convictions having fallen from 86·9 in the year 1881-82 to 81·4 in the year 1882-83.

These latter figures, however, convey a sufficient assurance that prosecutions are not needlessly entertained, since the percentage of convictions for 1882-83 cannot be considered in any other light than as satisfactory.

48. To discriminate forest offences, and to illustrate comparison with previous year, the following Statement shows the number of offences committed in the 1st and 2nd class reserves respectively:—

Forests.		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.
1st class reserves ...	1881-82 ...	3	13	2	4
	1882-83 ...	5	17	5	3
	Difference ...	+ 2	+ 4	+ 3	— 1
2nd class reserves ...	1881-82 ...	6	679	67	26
	1882-83 ...	3	513	78	11
	Difference ...	— 3	— 166	+ 11	— 15
Total ...	1881-82 ...	9	692	69	30
	1882-83 ...	8	530	83	14
	Difference ...	— 1	— 162	+ 14	— 16

49. It will be observed that with one exception there has been a general decrease in the total number of offences prosecuted. This exception is in the number of offences under grazing without permission, which has 14 more offences recorded against it in 1882-83 than in the year previous.

50. It remains to explain the large increase in the number of offences compounded. The increase is principally in the Raipur and Damoh districts. In the case of the former 402 more offences were reported than in the year previous, which the Deputy Commissioner explains, is due entirely to a better system of registering forest offences having been introduced. In the case of Damoh, no return of forest offences was received from that district last year. The return, however, for 1882-83 shows 237 offences as compounded during the year.

1st CLASS RESERVES.

Direction division.

51. No forest offences were reported.

Mandla division.

52. There were 32 cases, including one of last year, in which 80 persons were involved. In 5 cases in which 21 persons were implicated, convictions were obtained in 4 cases including 20 persons. Under offences compounded there were 27 cases reported. In 17 implicating 48 persons the offenders were permitted to compound. In 7 cases involving 11 persons these were at once discharged, and 3 cases remained over undisposed of at end of the year.

Hoshangabad division.

53. There were 20 cases of breaches of forest law reported, involving 22 persons. Of these cases, 4 related to serious offences, involving as many persons. One offender absconded, and in the case of the remaining 3 persons convictions against them were obtained before a Magistrate. Of the remaining cases 15 involving 17 persons

were disposed of by the persons paying compensation. In the one remaining case the offender was not detected.

Betul division.

54. During the year were repoted 40 cases of breaches of forest law, involving 69 persons. Of these, 3 cases including 5 persons were brought before a Magistrate and convictions obtained. In the remaining 37 cases, in which 64 persons were implicated, compensation was paid by the offenders.

Nimar division.

55. 177 cases were reported involving 227 persons. In 4 cases in which 7 persons were included were prosecutions deemed necessary, resulting in the conviction of all the offenders. In the remaining 173 cases, involving 220 persons, compensation was paid.

56. The Divisional Forest officer brings to light a new class of forest offence, namely, that of girdling trees with the view to killing them for their subsequent removal as dead wood, under the rule which allows forest produce to be collected and removed by purchasers.

Chanda division.

57. Ten cases involving 17 persons were reported from the Moharli reserve, in all of which compensation was demanded and paid. No other offences were reported.

Seoni division.

58. During the year 37 cases were reported implicating 76 persons ; 13 cases involving 19 persons were prosecuted, with the result that in 10 cases involving 16 persons convictions were obtained. In 3 cases the persons were discharged. Of minor offences 24 cases involving 57 persons were reported, in all of which compensation was demanded and paid.

Saugor division.

59. From this division 182 cases are reported involving 448 persons of which number only 2 cases were prosecuted and 2 persons convicted. The remaining cases relating to minor offences were compounded.

2ND CLASS RESERVES.

Nagpur division.

60. One case involving one person was prosecuted and conviction obtained. In 78 cases involving 159 persons, the offenders paid compensation and were discharged.

Bhandara division.

61. In 60 cases reported from this division, 49 cases involving 148 persons were prosecuted under the Forest Act; in 2 cases 8 persons were acquitted, and in the remainder convictions were obtained. The other offences being petty, were disposed of by compensation being demanded and paid.

Wardha division.

62. Forty persons in 18 cases were prosecuted during the year under report, with the result that 28 persons in 12 cases were convicted, and 12 persons in the remaining 6 cases were acquitted.

Chanda division.

63. Sixty-four cases involving 161 persons were prosecuted under the Forest Act, and convictions obtained in 48 cases against 100 persons. In addition to the above 1,484 petty cases

were reported, of which 89 cases were discharged at once; but the persons concerned in the remaining cases paid compensation at the usual or higher rates of duty. The petty cases related chiefly to unauthorized use of forest produce and grazing, and are therefore rightly considered forest offences.

Balaghat division.

64. Sixteen cases involving 54 persons, were prosecuted, and convictions obtained against 51 persons in 14 cases, 3 persons in 2 cases were acquitted. 524 persons were accused of petty offences, in 198 cases 418 persons were permitted to compound by payment of double rates, and the remainder were discharged, though confiscation of produce found in their possession was ordered.

Jubbulpore division.

65. There were reported 221 cases implicating 1,176 persons, of these 120 persons in 40 cases were prosecuted and convictions obtained against 51 persons in 19 cases; 69 persons in the remaining 21 cases were acquitted. There were 181 cases of minor offences involving 1,056 persons, who were permitted to compound by paying higher duty. The Deputy Commissioner explains the increase in the number of reported cases by attributing it to a stricter supervision having been exercised by the Forest establishment in detecting and reporting offences.

Saugor division.

66. In 3 cases 4 persons were prosecuted and convicted. 1,091 other petty offences were reported involving 2,666 persons. Of these 100 persons in 50 cases were at once discharged, and in the remaining 1,041 cases involving 2,566 persons compensation was permitted to be paid.

Damoh division.

67. Fourteen cases in which 33 persons were concerned were prosecuted and convictions obtained against 28 persons in 11 cases; 5 persons in the remaining 3 cases were acquitted. Of petty cases 237 were reported, involving 715 persons who were permitted to compound their offences:

Seoni division.

68 The number of forest offences reported was 157 involving 887 persons. In 28 cases 53 persons were prosecuted and the conviction of 45 persons in 25 cases obtained, while in the remaining 129 petty cases 834 persons concerned were permitted to compound.

Mandla division.

69. The number of persons prosecuted for forest offences was 182 in 127 cases. Of these convictions were obtained against 171 persons in 124 cases. 11 persons in 3 cases were acquitted. In addition to the above 1,895 petty cases were reported involving 5,049 persons who were permitted to compound their offences. The Deputy Commissioner exercised a stricter check over the cases sent up for prosecution, and hence the decrease in the number of prosecutions as compared with the year previous. But on the other hand, there is an increase in the number of offences that were permitted to be compounded.

Hoshangabad division.

70. The number of forest offences reported was 112, in which 165 persons were involved. Prosecutions were entered against 110 persons in 57 cases, with the result that convictions were obtained against 93 persons in 51 cases; 17 persons in the remaining 6 cases were acquitted. In addition to the above, 55 petty cases, involving as many persons, were reported, in which the offenders were permitted to compound their offences by paying higher duty.

Nimar division.

71. In this division the number of persons prosecuted was 89 concerned in 57 cases. Of these, 85 persons were convicted in 54 cases, and 4 persons in 3 cases were acquitted. 2 cases remained undisposed of at the end of the year. 196 petty cases were also reported involving 753 persons who were all permitted to compound their offences.

Betul division.

72. In Betul 124 cases of breaches of forest law were reported, in which 390 persons were involved. Of these, 10 persons in 7 cases were prosecuted, with the result that 9 in 6 cases were convicted; of the remaining 117 petty cases, the 380 persons concerned were permitted to pay higher duty and were discharged.

Narsinghpur division.

73. No offences against the forest law have been reported from this division.

Chhindwara division.

74. 12 cases including 29 persons were prosecuted, with the result that 23 persons in 9 cases were convicted, and 6 persons in 3 cases were acquitted There were also 334 petty cases involving 517 persons, who were permitted to compound.

With regard to the graver offences prosecuted, the Deputy Commissioner records the following remarks:—

"In two cases a considerable amount of teak had been removed by villagers, probably at the instigation of the malguzar, and it was found necessary to inflict severe punishments, with a view to stop such mal-practices in future. As a rule, the people acquiesced readily enough in forest arrangements, but when instigated by designing persons, the Gonds and wilder people will do almost anything, unless quickly pulled up."

Chhattisgarh division.

75. Of the graver forest offences entailings prosecution of the offenders, the following in a statement for the Chhattisgarh division:—

Raipur	...	26 cases	92 persons.
Bilaspur	...	7 „	25 „
Sambalpur	...	77 „	77 „
Total	...	110 „	194 „

The above were prosecuted with the following results:—

76. In Raipur 72 persons in 22 cases were convicted, 20 persons in 4 case were acquitted.

77. In Bilaspur 21 persons out of the 25 involved in 6 cases, were convicted, 4 persons in the remaining case were acquitted.

78. In Sambalpur 71 persons in 71 cases were convicted, and 6 persons in 6 cases were acquitted.

79. In regard to offences in which the persons concerned were permitted to compound their offences, the following is a statement:—

Raipur	...	Offences	460	Persons	1,051
Bilaspur	...	„	65	„	187
Sambalpur	...	„	2,094	„	2,144
Total	...	„	2,619	„	3,382

Of the above there were discharged in Raipur 128 persons involved in 32 cases, against whom no offence could be proved. In Sambalpur and Bilaspur all the offenders were punished by the infliction of higher rates of duty.

80. The Deputy Commissioner, Raipur, offers some remarks in explanation of the increase in the number of reported cases; the substance of his remarks is given below:—

"The whole of the increase is in compoundable cases, and the result is not "surprising, considering that under the old system such offences were not re- "corded; but the people when detected were allowed to pay the actual duty and "retain the produce. Under the new system of forest management (introduced "by Colonel Ward) offences are registered, and offenders punished, by being made "to pay increased duty, so that the present outcome is merely the result of an "improved system"

81. The Deputy Commissioner of Sambalpur does not explain the increase, but records that all prosecutions were undertaken after he had personally examined into the cases.

82. With regard to Bilaspur, the Commissioner of division has recorded his opinion that there was room for considerable increase of prosecutions for forest offences in the south-eastern forests of the district.

3.—FOREST FIRES.

General.

There is a nominal increase of 516 acres in the area now shown, as compared with that returned in last year's report, of forest under protection from fire in the 1st and 2nd class reserves. This nominal increase is due to the inclusion of the area of the Tigora reserve, 359 acres in the Saugor division, which though practically protected from fire for several years past without any special measures having been adopted for excluding fire, has hitherto been kept out of the Annual Statement Form No. 51. The addition of another 57 acres is due to the correction of areas hitherto incorrectly returned for the Punassa and Pandratola reserves

84. There was no other change made in the areas under protection from fire.

85 The Statement overleaf a comparative Statement, relating to the whole circle of forest area protected from fire during the years 1881-82 and 1882-83.

Explanation of error in area returned for 1881 82

86. The area under protection and that actually protected in 1881-82 was incorrectly returned in the report for last year, and which error it is now believed was due merely to oversight when checking the figures detailed in Form 51. The correct total figures which ought to have been shown in this Statement are—

			Acres.
Under protection	...	...	912,411
Actually protected	...	...	781,722
Failed		...	130,689

The difference by error being plus 7,829 acres in each case.

Forest.	Area in acres.				Cost of area actually protected.																
	Under protection.		Actually protected.		Total.						Per square mile.						Per acre.	
	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.			1882-83.			1881-82.			1882-83.			1881-82.	1882-83.
	Acres.	Acres.	Acres.	Acres.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Pies.	Pies.
1st Class Reserves	867,614	868,273	739,712	853,982	13,022	7	6	14,714	7	8	11	4	3	11	0	5	3·380	3·308
2nd Class Reserves	44,797	44,654	42,010	35,986	727	5	5	857	5	5	11	1	3	15	3	11	3·324	4·574
Total ...	912,411	912,927	781,722	689,968	13,749	12	11	15,571	13	1								
Average for the Provinces ...											11	4	1	11	3	1	3·377	3·359

87. Accepting the above figures as being now correctly rendered and adding to them the nominal increase of 516 acres now shown in Form No. 51 for the first time, the total area under fire protection up to the end of the dry season of 1883, was as follows:—

		Acres.
Under protection	... ...	912,927
Actually protected	... ...	889,968
	Failed ...	22,959

88. The area protected was at a cost of Rs. 11-3-1 per square mile, or pies 3·359 per acre. The total cost of protection has been Rs. 15,571-13-1.

89. The following details refer to the 1st class forests in which protection of forests from fire was attempted. Following these, the 2nd class reserves are reviewed.

Forest fires during 1882-83.

90. During the year 36 fires were reported in forests under protection.

FIRST CLASS RESERVES.

Divisions.		No. of fires.	Area over which the fire spread. Acres.
Direction	...	... 1	2,883
Mandla	...	... 3	1,756
Hoshangabad	...	... 8	1,526
Betul	...	... 5	1,558
Nimar	...	... 12	6,166
Chanda	...	... 1	320
Seoni	...	... None.	...
Saugor	...	... 1	90
	Total	... 31	14,291

SECOND CLASS RESERVES.

Nimar	...	... 1	8
Wardha	...	... 3	8,300
Balaghat	...	... 1	360
Saugor	...	... None.	...
	Total	... 5	8,668
	Grand Total	... 36	22,959

91. Compared with the two previous years, the result is good—

In 1880-81	...	...	54,552 acres burnt.
„ 1881-82	...	...	130,689 „
„ 1882-83	...	...	22,959 „

FIRST CLASS RESERVES.

92. In the Direction division fire passed over the whole of the Kantranala reserve, while the Hathibari reserve was successfully protected. One fire in the Mandla division was due to the lighting of the grass in unprotected forest adjoining the Jugmandel reserve, which spread over 1,600 acres of the reserve before it could be put out. The fires reported from the Hoshangabad and Betul divisions are in a few cases attributed to the defects of the local forest establishment but in the greater number of the cases the fires were lighted inside the reserve and thus doubtless by incendiaries. No trace, however, of the culprits has been obtained by the police, to whom the enquiries as to the origin of the fires was entrusted.

Nimar as usual heads the list as regards area over which fire spread. Protection is difficult here, owing to the dry climate, and the more or less lawness nature of the people inhabiting the adjoining foreign territory.

From Chanda a fire is reported in the Mirkulloo reserve, which is said to have been caused by a lightning discharge, but the case is a very doubtful one and therefore has been remanded for further enquiry.

SECOND CLASS RESERVES.

93. The large fire in Wardha is reported as having been lighted by the Gowlees, in order to obtain a better crop of grass during the ensuing rains. Police enquiries here, too, have failed to trace the offenders.

94. In the Appendix Statement A, will be seen the details of fire protection, and results obtained compared with similar details for the year 1881-82.

4.—GRAZING AND FENCING.

General.

95. In the 1st class reserves cattle were excluded from—

(*a*). Forests under protection from fire.

(*b*). Forests in which improvement cuttings were being carried out.

The exclusion, however, of cattle from the forests under protection from fire has not been strictly carried out every where. In some divisions cattle were allowed to graze in the protected forests under certain restrictions, and it has not been found that any inconvenience or danger from fire has resulted from the practice. Briefly the following Statement shows the forests which were closed against grazing, and those which were thrown open to grazing wholly or partly.

Reserves under fire protection, from which grazing was excluded.		Reserves under fire protection in which grazing was permitted wholly or partially.	
Direction Division	... All protected forests.	Betul Division	... All opened to grazing.
Mandla do.	... All protected forests.	Nimar do.	... All opened to grazing.
Hoshangabad do.	... Bori except for cattle belonging to resident villages.	Chanda do.	... Moharli part only Taroba block.
Chanda do.	... Bimaram and Mirkulloo forests.	Saugor do.	... All opened to grazing.
Seoni do.	... All protected forests.		

96. The second class reserves were open to grazing, except in Saugor, in which district only the Hirunpur Basa, and Julhunder forests were closed against grazing.

97. The number of animals to which the 1st and 2nd class reserves, and the unreserved forests, afforded grazing during the year, will be seen by the following comparative table. But this table by no means shows all the grazing the Government forests practically afforded, as no data have been given in several of the Annual Reports received from Deputy Commissioners. That grazing and the sale of fodder grass formed tangible items of forest revenue in their districts will be seen by the totals credited under this head in the table. The total revenue under this head in 2nd class reserves was as follows:—

1881-82 ... ... Rs. 3,48,570

1882-83 ... ... „ 3,54,105

Where commutation exists no returns, showing the number of cattle grazed can be had, unless Deputy Commissioners undertake to make special arrangements for supplying the information. Considering the important bearing this subject has on the formation of fodder reserves in these Provinces, the required information ought to be forthcoming in each Annual Forest Report.

Division.	1881-82.						1882-83.					
	Buffaloes.	Cows and Bullocks.	Sheep and Goats.	Ponies and Donkeys.	Camels.	Revenue.	Buffaloes.	Cows and Bullocks.	Sheep and Goats.	Ponies and Donkeys.	Camels.	Revenue.
1st Class.						Rs.						Rs.
Direction ...	...	...	...	...	..	...	...	...	...	...	...	...
Mandla† ...	676	12,147	...	2	...	1,721	1,030	7,542	...	...	...	1,226
Hoshangabad†	6,183	35,089	487	...	...	5,939	6,056	39,566	444	...	74	6,340
Betul† ...	5,128	15,398	1,160	120	...	3,635	4,018	13,609	857	...	..	2,926
Nimar† ...	8,681	22,487	1,070	...	..	4,918	8,778	21,110	1,124	...	...	5,372
Chanda† ...	463	6,714	1,563	...	...	1,157	1,287	11,585	1,573	...	...	1,766
Seoni† ...	4,006	27,873	1,398	...	...	5,741	3,928	27,950	2,844	...	...	6,266
Saugor† ...	2,260	9,563	244	21	...	2,205	2,367	10,865	141	54	...	2,511
Total ...	27,392	1,29,271	5,822	143	...	25,310	27,459	1,32,227	6,983	54	74	26,407
2nd Class.												
Nagpur ...	5,106	70,620	22,230	...	...	15,640	5,825	72,259	23,715	...	...	15,579
Bhandara ...	...	...	...	...	...	21,280	...	...	...	...	...	20,248
Chanda † ...	31,911	2,53,382	1,22,563	...	...	25,008	38,509	2,87,635	1,53,141	...	...	27,212
Wardha ...	..	...	...	...	...	16,042	...	...	...	...	...	15,615
Balaghat ...	...	...	...	...	...	10,776	...	...	...	...	...	10,511
Jubbulpore ...	...	...	...	...	...	16,295	...	...	...	...	..	11,128
Saugor ...	42,294	1,83,591	14,739	865	...	33,532	42,688	1,87,272	12,846	841	...	34,941
Damoh† ...	...	...	...	...	...	29,501	36,776	1,70,275	16,197	...	...	29,881
Seoni† ...	24,078	1,79,585	11,495	...	...	28,305	25,431	1,74,156	10,958	...	...	26,724
Mandla ...	...	...	...	...	...	57,243	...	...	...	...	...	58,436
Hoshangabad†	21,515	2,22,853	42,239	561	106	18,436	19,078	2,32,522	46,818	1,215	156	20,287
Betul† ...	16,869	2,77,028	35,645	...	...	18,452	15,828	2,53,219	45,580	...	...	19,082
Chhindwara†	...	...	...	...	...	16,772	14,239	1,24,188	24,292	2	...	14,387
Narsinghpur ...	...	...	...	...	...	4,987	...	...	...	...	...	5,125
Nimar ...	...	...	...	...	...	21,225	...	...	...	...	...	21,222
Raipur ...	...	...	...	...	...	17,079	...	...	...	...	...	17,596
Sambalpur ...	...	...	...	...	...	497	...	...	...	...	...	...
Bilaspur ...	...	...	...	...	...	3,502	...	...	...	...	...	4,231
Tota ...	1,41,778	11,87,009	2,48,911	1,426	106	3,48,570	1,98,369	15,01,326	3,33,547	2,058	156	3,52,105

Explanatory Note.—The revenue given in this table against Divisions and Districts Marked thus † is that from grazing alone. For total receipts under II. (*d*) see Annual Form No. 53.

98. The following is an abstract of the above table comparing the number of animals grazed in the 1st and 2nd class reserves respectively :—

Reserves.	1881-82.					1882-83.				
	Buffaloes.	Cows and Bullocks.	Sheep and Goats.	Ponies and Donkeys.	Camels.	Buffaloes.	Cows and Bullocks.	Sheep and Goats.	Ponies and Donkeys.	Camels.
1st Class ...	27,392	1,29,271	5,822	143	...	27,459	1,32,227	6,088	54	74
2nd Class ...	1,41,773	11,87,009	2,48,911	1,426	106	1,98,369	15,01,326	3,33,547	2,058	156
Total ..	1,69,165	13,16,280	2,54,733	1,569	106	2,25,828	16,33,553	3,40,530	2,112	230

(5).—NATURAL REPRODUCTION.

General.

99. Work under this head carried out during the year, was limited. Cutting over badly grown trees, chiefly teak, with the view to improvement of growth by the resulting crop of shoots from stools, was undertaken in the 1st class forests of Mandla, Hoshangabad and Betul. In the Bhimaram forests, a few large saj and other trees were removed in order to give more room to the young teak now coming on. The Divisional Forest Reports from Mandla, Seoni, and Saugor, record some observations made by the forest officers of those divisions on the more apparent results arising out of previous operations of the kind under notice, but which observations by themselves are not of sufficient importance to reproduce here. In the second class reserves no work of this kind was undertaken.

FIRST CLASS RESERVES.

Mandla Division.

100. In the Singrampur reserve, an area of 30 acres was cut over, and badly grown teak trees, which gave no promise of becoming any better, were removed, and their stools carefully dressed. Some teak poles badly injured by frost, were also at the same time removed. Similar operations carried out in this reserve, during previous years, have resulted in a strong and vigorous crop of healthy shoots. The divisional officer reports, that in the Lower Gour forests, some thinnings were made, and cutting over badly geown trees effected, but it is not stated over what area these operations have extended. In the same forests, an area of 32 acres of bamboo forests, was cut over with the view to obtain better grown clumps. In this cutting, the healthy vigorous clumps were spared, and only the badly grown ones removed. It is doubtful, though, on a dry poor soil, if such an operation as the above, is not rather more likely to help the extermination of the species. In most localities on good soil, clumps cut away, soon throw up vigorous shoots, which gradually assume the clump stage. However, the present operation in the Lower Gour forests will be watched with interest. The following remarks are added, in continuation of those recorded in paragraph 64 of last year's report. The Divisional officer, Captain Losack, reports that in the Bunjar valley and Motinala forests, under the combined influences of protection from fire, and the absence of frost, sal has now assumed a vigorous growth, and that the species is extending into the open plains. The first part of this statement is quite in accord with what might reasonably be expected to result in a forest from which fires have been kept out for a number

of years; but the latter part of the statement is not so obvious, as it is extremely doubtful, if any laterial extension of the existing belts of sal forest is now taking place No doubt, that under the conditions implied, and under the immediate cover of the existing forest, a slight fringe of young re-growth is taking place, but that probably is all. The existence of wide plains between the belts of sal forests is due to geological causes, which have brought about present conditions, that are apparently adverse to the extension of the sal beyond its present limits. Further discussion on this interesting subject cannot, however, be carried on through the medium of an Annual Progress report, which must confine itself to a bare statement of the year's transactions.

101. Reproduction of teak is reported as being now very good in parts of the Jagmundal forest, which has been under protection from fire for a number of years.

102. With regard to the Bunjar forests, the following observations are recorded. These observations though fragmentary, are nevertheless of interest as far as they go as showing that reproduction from the stools of mature sal trees, felled in carrying on timber operations, is possible. In the case of 74 stools examined by the divisional officer, he found 35 had reproduced shoots, many of which were in vigorous growth. In one instance, he records, having found a young shoot, thus reproduced, which measured 8 feet 2 inches, and which had grown out of the stool of a tree felled during the previous year; the cubical volume of this tree was found to be 131·78 feet In another case a sapling was measured in the same forest on the 11th of May, which had made a seasonal growth of 3 feet 1 inch.

103. In the forests of Raipur, it has recently been observed, that sal coppiced freely where ever it had been cut down for Dhya clearings, but no where was it seen, that the larger well grown mature trees had reproduced shoots from stools as in the instances recorded in the Bunjar valley.

Determination of rate of growth of sal.

104. With a view to determine the rate of growth of sal in the Bunjar forests, three fully stocked plots, of one acre each, have been selected, and all the trees growing within the boundaries of these plots marked and measured. The mark used is a ring of paint girdling the tree horizontally at a suitable height from the ground, over which the measuring tape is passed round to obtain the girth. A full record of the measurements, so obtained, has been made, and arrangements for continuing these observations have been entered into.

Hoshangabad Division.

105. For improvement of growth, the operation of cutting over badly grown teak was continued in the Ajnal block of the Rajaborari and Dekna block of the Saonligarh reserves. The number of teak trees cut over was 3,682. The remarks recorded in paragraph 8 of last year's report also apply to this year's work. A very marked improvement in the re-growth of teak, produced from stools previously cut over, is observed in such parts of the forest, where these operations have been carried out. The quantity and value of the material obtained by these cuttings will be discussed under another Chapter.

Betul Division.

106. The operations reported in paragraph 99 of last year's report, were continued during 1882-83. In the Baka teak plantation, the work was carried out by cutting over badly grown teak trees, and trees injured by frost, and which therefore gave no promise of improvement.

(6).—ARTIFICIAL REPRODUCTION.

General

107. Very little has been done in creating artificial plantations, or in stocking forest areas with the more valuable species, or planting done with the view to improving the composition of the natural forests. The following details furnish all the information that is available on the subject.

Direction division.

108. In the 1st class reserves, some sowing and planting of teak in the Hathibari reserve, is recorded from the Direction division. These operations are still carried on in this reserve, with the view to filling up small blanks which exist in the natural forests. Their cost during the year was Rs. 77.

Mandla Division.

109. From the Mandla division it is reported, that a nine acre teak plantation of 1879-80 in the Bunjar forests, is now doing well. Some teak seed sown in the Jugmandal and Bunjar forests, have apparently failed. Sissoo has been successfully raised in seed and nursery beds in the following reserves: namely, Singrampur, Bijeragogarh, Lower Gour and Barela, with a view to planting out and thus improving the present composition of these forests.

Hoshangabad Division.

110. Some 500 fruit and evergreen trees were raised in the Hoshangabad division, with the object of planting them out, during the ensuing monsoon, along the boundary line of the reserves.

Betul Division.

111. In the Betul division efforts are being made to utilize the labour of the lower forest subordinates in tree planting during slack periods, when this is possible without detriment to their regular duties. In this way, during the year under report, 335 young trees were planted out along the inner edge of the boundary line of the reserve. Inclusive of the number planted out in the previous year, the stock of young trees now number 514, reported as doing well. A small plantation of sandal wood has been experimentally tried in the Bowergarh reserve, 500 seedlings were planted out, of which 150 were shortly after-wards destroyed by hares. A fence was then put round the plantation to exclude the hares. The remaining 350 young sandal plants are now reported as doing well.

Nimar Division.

112. In the Nimar division, and with reference to the remarks contained in paragraphs 116 to 188 of last year's report, the 100 acres, which had been pitted out, but left blank owing to the failure of rain in 1881, were filled up during the months of June and July 1882, with teak, bambu, shisham, sissu, achar, khirni, jamun and sevun. But owing to the rain not coming down at the right time a very large percentage of the plants have failed. In fact, as far as it can be judged at present, planting operations of late years in the Nimar division have been more or less pronounced failures. The cost of these operations including watering, &c., was Rs. 393.

Saugor Division.

113. In the Saugor division some work was done on the trench and ridge system, the ridges being sown with seeds of hardy and useful forest trees. In some instances transplants were also put out with considerable after success. To act as nurses to the young forest trees and to keep the ground moist by shading it, seeds of the castor oil plant was sown, and a good crop of this species raised which now affords all the shelter required by the seedlings and young transplants. These operations were undertaken in the Ranipura and Hathko reserves, and so far as yet reported appear to have been attended with success. Some little injury is reported from frost, but now that the castor oil is well up injury from this cause to the tender seedlings is not likely to occur again. Transplanting bambus

was not undertaken during the year. The table below shows the number of bambu clumps planted out in former years and which were alive on 31st March last :—

Forest.	Year of planting.	No. alive, 1881-82.	No. alive, 1882-83.
Garhakota ...	1879-80 1880-81 1881-82	38,610	20,064
Hathko ...	1879-80 1880-81 1881-82	About 25,000	11,000
Rangir	1881-82	7,012	Not known.
Ranipura	1881-82	.....	3,000

In Garhakota the bambu clumps planted out in 1873, again yielded 800 stems, which were cut out and sold realising Rs. 32 or at the rate of Rs 4 per 100 pieces. There is no question that if these bambu plantations are rightly managed in the Saugor division that they will become very paying concerns in time. What is required is concentration of work in one forest or reserve until it has been properly stocked and the success of the plantations ensured, before beginning similar operations elsewhere. At present operations are scattered over some four five different forest blocks which are situated widely a part from one another, thus rendering intelligent supervision difficult and almost impossible.

SECOND CLASS RESERVES,

Wardha Division.

114. With reference to paragraph 188 of last year's report on the subject of bambu plantations in Wardha, the Deputy Commissioner is now of opinion that more suitable sites for these plantations might have been selected. He does not consider that the existing plantations offer any hope of becoming successful.

Balaghat.

115. From Balaghat it is reported that an addition of 3 acres has been made to the tun plantation in the Pendratola reserve, which, along with the older plantation, is reported as coming on well.

Damoh.

116. In Damoh bambu clumps were put out in the Kishuntalao forest. Somewhere between the numbers 4,000 and 5,000 were planted out from the nursery started in 1879-80. The new transplants are reported as doing well. Seeds of forest trees such as teak, saj, koha, hurra, &c, were sown near the Kishuntalao and are reported to have germinated freely.

Sambalpur.

117. In Sambalpur the Deputy Commissioner has made an attempt at planting sal, saj, and a little teak at the base of the Motijhirrun hill which stands out at a short distance north-east of Sambalpur and which occupies an area comprising 95 acres. Of this plot about 25 acres are fairly covered with a young sal forest, but the remainder is bare of tree vegetation. The object of the present undertaking is to fill up the blanks and so bring the hill again under wood, which 25 years ago, is said to have been covered with a healthy young forest, composed chiefly of sal, but which has been reduced to its present condition, through over-cutting for fuel and for small building material by the inhabitants of the town of Sambalpur. The object that the Deputy Commissioner has in view is a very sound and practical one, and which will doubtless in a few short

years vastly improve the condition of the land and the present aspects of the hill, and at the same time there will be established a small forest situated at a convenient distance from the town of Sambalpur. About 10 acres of the land have been planted out, and the young transplants are reported as doing fairly well There is no doubt that in a moist climate like that of Sambalpur planting operations are bound to be successful, so long as they are carried out at the right season and mistakes, such as planting in wet or boggy soil, are avoided. The hill in question is composed of thick bedded gneiss and quartzite which are water bearing, and that along the south-west base of the hill this water is discharged and brought very close to the surface rendering the surface soil there water charged and boggy. If the sites of these springs are avoided the planting operations must succeed, because all other conditions, favourable to success, are present in the climate and soil of the locality.

(7).—CUTTING OF CREEPERS, &c.

Mandla and Chanda division.

118. The only divisions in which this work was carried out on systematic principles are the Jugmandal forest in the Mandla Division, and the Bhimaram forests of the Chanda Division. The work in Jugmandal was commenced on the eastern slopes of the Ranichua hill and was carried on in the direction towards the centre of the reserve. About acres were gone over and all the creepers cut at a cost of Rs. 118.

119. The creepers which were cut during the rainy season do not appear to have been finally exterminated, because by the first week in February following about 50 per cent of those cut threw up strong and vigorous shoots some to a length of about 15 feet The plan adopted for destroying the creepers was to dig the earth away from round the roots and then to cut the stems below the soil surface. This plan was afterwards changed to that of cutting a piece out of the stem flush with the soil and beating down the exposed stump so as to separate the bark from the wood. This treatment is supposed to give promise of better results in the future.

120. The work of cutting creepers and removal of inferior growth, in order to afford light and space to the young teak and other valuable species now on the ground, was carried out in pursuance of a fixed plan in compartments 6, 7, 16 and 17 Division III. of the Bhimaram reserve. The work it is believed, has been well done, but no remarks to that effect are to be found in the Divisional report. The cost of those operations amounted to Rs. 157.

(8).—EXPERIMENTS AND EXOTIC TREES.

General.

121. The only experiment worth recording is one that was undertaken in the Mandla Division, but the Divisional Forest officers Chanda, Seoni and Saugor have forwarded some remarks relating to the condition of the exotic trees in their respective Divisions. The substance of these remarks will now be re-produced. Nothing in the way of experiments were carried out in the 2nd class reserves.

Mandla Division.

122. In the Mandla Division the experiment has been tried to introduce the tea plant into the Bunjar forests. With this view a small addition was made to the planted area during last rains, but some 10 per cent of the later transplants have since failed, and the older established plants have likewise died off in large numbers. The Divisional officer rightly attributes this to the extreme dry heat which prevails during a part of the year. It is most likely that the tea plant will not succeed for any economic purpose outside the zone of heavy rain-fall exceeding 75 inches per annum. Doubtless in the Central Provinces in favoured localities a few plants can be kept alive as exotics merely,

but this is not the intention of the present experiment, which aims at the introduction of the tea plant as a source of practical industry into the uplands of Mandla and Balaghat. This it is feared, is beyond realization under existing climatic conditions. The experiment will therefore not be extended until it is seen how far the hopes, previously entertained, are realized in the case of the small plantation which has now been established.

Chanda Division.

123. In the Chanda Division the Mahagony trees planted out at Moharli appear to be getting on well, some of these having attained the height of 17 feet From the Officiating Conservator's own knowledge those planted out in the forest compound at Chanda have been neglected, and consequently they have remained stunted, whilst several have died from this cause alone. The "*Eucalyptus saligna*" and Carob have also suffered from neglect and are now nearly exterminated. The *Pithecolobium saman* a large grove of which was planted in the forest compound at Chanda, has done better, but it was observed that cattle were allowed to bark the young trees, thus causing severe injuries to them. The trees in this grove are beginning to close over head and will very soon be in a condition to give complete cover to the ground. At Allapilly, in the Ahiri reserve, a grove of this species, planted at the same time as the one in Chanda, has completely closed over head, and the young trees are now larger and better grown than those in Chanda. This success is attributed to the moister climate of Allapilly, and in the soil, which is derived from the decomposition of basic crystalline rocks being richer in all the constituents essential for tree growth. The "Mesquit Bean" still languishes as a low trailing shrub without as yet making any effort to grow an upright stem. It appears to grow with some vigor in the darker soils which are derived from the decomposition of trap rocks.

Seoni Division.

124. From Seoni it is reported that the *Eucalypti* planted at Korai have failed unmistakably. A few trees are said still to survive, but that is about all. The Carob is reported as flourishing both at Seoni and Rukhur, but it has not yet borne any fruit. And the *Pithecolobium saman* is said to be doing well both at Korai and Rukhur.

Saugor Division.

125. In the Saugor Division the forest officer Mr. G. F. Taylor, Assistant Conservator, has recorded some observations on the subject, of which the following is an abstract. In Garhakota some young Carob plants have been raised which appear to be strong and healthy. These will shortly be planted out. The *Eucalypti* appear to be in excellent condition at Garhakota. The following measurements of 5 of the largest of these trees is given below :—

No.	Girth.	Height.	Growth made in girth during 1882-83.	Remarks.
1	26 ins.	48 ft. 6 ins.	4 ins.	Average girth made during the year 4·95 inches.
2	21½ „	43 ft. 9 ins.	5½ „	
3	20 „	43 ft. 6 ins.	5 „	
4	22 „	41 ft. 6 ins.	5 „	
5	17¼ „	41 ft. 4 ins	5¼ „	

The Mahogany trees in Garhakota are in bad condition and apparently nothing can now be done for them to improve their growth. The Mesquit Bean is reported as retaining the straggling habit by which this species has characterized itself in its foreign home; 26 plants are reported as being alive. And the "*Pithecolobium saman*" has practically proved a success. The total cost of these experiments for the year is Rs. 117.

126. The experiments referred to in paraghraph 284 of last year's report as being carried out in the Telinkheri estate, have been continued during 1882-83 under conditions precisely similar to those desribed before. The older plantations have proved unqualified successes, the young trees in which are making considerable vegetative progress and are, moreover, now quite passed that stage when danger of serious injury to them from any subsequent drought might be apprehended.

Telinkheri estate.

The outlay on this estate amounted to Rs. 2,650, and the receipts to Rs. 2,496. As a set off against the deficit a considerable number of orange grafts, of superior quality, are now in readiness for sale, the value of which, with that of stock of firewood still on hand, will more than cover.

(9) COMMUNICATIONS AND BUILDINGS.

General.

127. The remarks under, this head are confined to Mandla, Betul and Chanda Divisions, from elsewhere nothing is reported.

Mandla Division.

128. In the Mandla Division the only works carried out during the year were the following: -The widening of the Premadhar Channel in the Nerbudda river, referred to in paragraph 68 of last year's report, with a view to facilitate the passage down it of timber rafts. In the Lower Gour forests a short bit of road was constructed to facilitate the removal of produce. It is proposed to extend this road, and with this view levels have been taken and a line selected ; plans and estimates for this extension are now under preparation. At Kisli, in the Bunjar valley, a store and dwelling house of pukka masonry has been built, at a total cost of Rs. 446. This work was completed during the year.

Betul Division.

129 The Divisional forest officer, Betul, reports that a new road has been built in the Bowergarh forests, a length measuring about 4 miles between Katawari and Kukra having been opened out. It is reported that the opening up of this bit of road has had a marked effect in increasing the removal of wood and other produce from the forest. The cost of making this portion of road was Rs 483.

Chanda Division.

130. The only other work done in this direction was that of completing last of the series of roads across and through portions of the Bhimaram reserve in the Chanda Division, which were designed at the suggestion of Dr. Brandis and marked out on the ground some years ago. The present road was taken from Korsinee and led right across in a south-east direction to the opposite boundary a distance of 3½ miles. The cost of making this road including the cost of cleaning existing roads in this reserve was Rs. 62.

CHAPTER IV.

YIELD AND WORKING.

(1).—*Departmental operations.*

General.

131. Operations by departmental agency were only undertaken in the 1st class reserves in the following divisions, viz. Mandla, Hoshangabad, Chanda and Saugor.

In the 2nd class reserves a few small operations were carried out in Wardha, Balaghat, Mandla and Betul Divisions.

132. The following is an abstract Statement of the yield obtained by departmental agency :—

Description.	No. or pieces.	Cubic feet.	Cart load.	Head load.	Bundles.	Maunds.	Grass stack.
Teak logs ...	...	2,258	...	...	...	...	...
Teak sleepers ..	...	6,713	...	...	...	...	..
Teak scantlings ..	...	926	...	...	...	...	...
Teak planks ...	...	3,478	...	...	...	...	...
Teak poles and pieces ...	12,441	...	7	...	...	...	...
Sal logs ...	...	4,003	...	...	...	...	...
Sal sleepers ...	...	10,394	...	...	...	...	...
Sal scantlings ...	...	3,495	...	...	...	...	...
Sal poles ...	209	...	...	...	...	...	...
Sal slabs ...	96	...	...	...	...	...	...
Logs other than teak and sal	...	4,567	...	...	...	...	...
Sleepers do. ...	...	23,774	...	...	...	...	...
Planks do. ...	...	203	...	...	...	...	...
Scantlings do. ...	35	...	...	...	...	...	...
Poles & pieces do. ..	26,383	...	...	...	...	...	...
Boats ...	10	...	...	...	...	...	...
Firewood ..	...	...	219	11	6	2,427	...
Charcoal ...	...	...	...	...	...	289	...
Bambus ...	1,96,100	...	41	...	...	...	...
Grass poolas ...	9,03,000	...	...	28	...	...	1
Other minor produce .	3,480	...	...	...	...	2,543	...
Farm crop ..	...	...	...	...	2,495	58	...
Hides and skins ...	44	...	...	...	...	...	...
Horns ...	...	...	...	...	...	10	...

FIRST CLASS RESERVES.

Mandla Division.

133. The following statement shows the yield in this Division:—

Description of produce.	Number.	Cubic feet.	Maunds.	Polees.
Sal logs	113	4,003	...	...
" Scantlings	1,244	3,474	...	...
" Sleepers	3,035	10,394	...	...
" Furdas	96	...	...	...
" Pieces	25	21	...	...
" Poles	209	...	...	...
Teak logs	25	810	...	...
" Bullees and poles	1,405	...	...	...
Pieces other than teak and sal	539	...	...	...
Boats	10	...	...	...
Waif and stray wood	1,120	...	...	...
Firewood	...	...	750	...
Charcoal	...	...	286	...
Bambus	1,06,209	...	...	...
Grass	...	...	...	7,78,400
Other minor produce	...	...	2,283	...
Hides	8	...	...	...
Horns	...	...	2	...

The yield compared with that of the year previous is larger, but very little so in the principal items of produce. There is a considerable increase in bambus which is due to the improvement cuttings made in the Lower Gour forests.

134. The demand for forest produce still remains small in this Division. A slight improvement in this respect is however, observed in an increased demand during the year for small wood, bambus, grass and fuel from the Barela and Lower Gour forests.

135. The following Statement shows the details of Departmental timber operations :—

Description of work.	Pieces.	Cubic feet.	Cost.			Rate per cubic foot.	
			Rs.	a.	p.	As.	Pies.
Sawing scantlings ...	4,247	13,778	2,518	9	3	2	11·10
Carting logs and scantlings from forests to Mocha ...	4,147	17,566	2,143	13	9	1	11·43
Rafting logs and scantlings from Mocha to Mandla ..	4,247	14,884	972	5	0	1	0·54
Rafting scantlings from Mandla to Burridhur ...	4,253	14,650	1,481	3	4	1	7·41
Rafting from Burridhur to Gwarighat ..	4,564	15,455	1,273	14	5	1	3·83

136. Timber operations in this Division are necessarily small owing to the present means of communication with the forests being defective. There is also a difficulty regarding the labour supply not yet overcome. 330 Sal trees were felled in the Bunjar forests during the year in pursuance of a plan which, provisionally, limits the fellings to 700 trees per annum. The charges in connection with timber operations amounted to Rs. 9,507, and the value of timber sales including those of minor produce to Rs. 27,938.

137. The departmental timber operations were small and confined to the cutting and dressing of teak and fuel, resulting from improvement cuttings, and the collection of the same at convenient places along the forest roads. The yield from these forests will be seen by the following Statement:—

Hoshangabad Division.

		No.			No.
Teak stumps	...	3,682	Firewood cartloads	...	79
Teak chulias	...	564	Mohwa maunds	...	9½
Teak sakties	...	2443	Mohwa, seed, seers	...	8
Teak khakurs	...	242	Hids and skins	...	34

138. The quantity of produce sold during the year will be seen by the Statement below :—

Teak cubic feet.	Teak stumps.	Teak chulias.	Teak sakties.	Beeja and Haldu sleepers.	Firewood cart load.	Bambus.	Mohwa, maunds.	Mohwa seed, seers.	Hides and skins.
193	10,607	693	2,409	179	79	200	9½	8	34

139. The charges connected with departmental operations in this Division amounted to Rs. 710, and the value of the sales to Rs. 1,998. The bulk of the produce sold was small and of inferior kind.

Chanda Division.

140. In paragraph 135 of last year's report the conditions under which the Moharli forests are worked were described. Those conditions remained in force during the year under report.

141. A small quantity of building wood and bambus was cut and transported from the Moharli forests to the Warora and Moharli depots, at a cost of Rs. 1,940 4-11. The value of the sales was Rs. 6,639-8-0, while there remained at close of the year a balance of stock worth about Rs 528. A small quantity of minor produce, such as harra, lac, and Stags horns was collected at a cost of Rs. 116-7-9, and the value of the sales under this head was Rs. 345-2-7.

142. There were also felled about 7,000 small poles of the unreserved and inferior species for sale and removal from the forest by purchasers, because in the previous year there was a demand for this class of produce. Poles were felled at the rate of Rs. 4 per 1,000, and the price at which some of them sold was Rs. 9 per 100.

143. In the Ahiri reserves departmental timber operations were confined to the felling of the following trees, namely 23 teak, 1 sheshum, 2 tendu, 5 saj, 1 bija, 4 kurrum, and 12 moyen. In addition to these 38 teak trees standing on the boundary lines were also felled. Thus making a total of 86 trees. The number of logs obtained from them was 114, of which only 47 measuring 942 cubic feet were brought to depot at Allapilly.

144. In accordance with Government of India Circular No. 2 F., dated 23rd January 1882, 85 specimen logs including most of the different kinds of timber trees found in the Bimarum and Mirkalloo reserves were felled and collected at a total cost of Rs. 37-5 0.

145. The following Statement shows the produce cut, collected and brought to depot by departmental agency:—

Description of produce.	Number.	Cubic feet.	Maunds.	Poolas.	Grass stack.
Teak logs	88	1,880	...	...	...
„ sleepers	4,031	6,713	...	...	...
„ scantlings	1,277	925	...	...	...
„ planks	7,933	3,220	...	...	...
„ poles	400	...	...	...	...
„ saj logs	514	...	...	...	...
„ sleepers	9,849	23,159	...	...	...
„ planks	99	33	...	...	...
Logs other than teak and saj	37	379	...	...	...
Scantlings &c. do.	1,444	4,056	...	...	...
Poles do.	1 618	...	...	...	...
Wood for manufacture of carts, &c. ...	6,025	...	...	...	...
Bambus	10,386	...	...	...	...
Grass	...	...	...	27,600	1
Other minor produce	...	...	141	...	...
Farm crop	...	...	10½	...	...
Horns	...	...	8	...	...

Working of the sawing machinery.

146. During the year under report 76,711 cubic feet of small and inferior logs were converted in the mills, and yielded an out-turn in clean-sawn marketable material of 33,842 cubic feet; the wastage in conversion being 42,869 cubic feet. This

large percentage of wastage is explained as due solely to the very inferior stock of logs which remained over in the depot and which only could be utilized with advantage in the manner shown above.

147. The working of the sawing machinery is illustrated by the following Statements :—

Timber.		Feet cut.		Out-turn.			Current charges.			Remarks.
Logs.	Cubic feet.	Running feet.	Superficial feet.	Kind and description of timber.	No. of pieces.	Cubic feet.	Rate per 100 cubic feet.	Total.		
6,763.	76,711.	6,29,411.	4,14,393.	Teak sleepers 6' × 8" × 5" ...	4,030	6,714	Rs. a. p.	Rs. a. p.		Rate per 100 cubic feet of rough timber Rs. 3 11 4
				Saj do. 6' × 8" × 5" ...	6,087	10,141	Rate per 100 cubic feet. 19 11 9	6,679 8 2		
				Saj do. 10' × 10" × 5" ...	3,684	12,791	" Rg. ft. 1 1 0			
				Teak scantlings ..	1,180	886	" Supl. ft. 1 9 9			
				Teak planks	8,172	3,260				
				Saj planks	121	50				
				Total ..	23,274	33,842				

Detail of charges from 1st April 1882 to 31st March 1883.

Item No.	Particulars.	Amount.			Total.		
		Rs.	a.	p.	Rs.	a.	p.
1	Pay of Native Foreman	462	10	5			
2	Establishment employed on Machinery ...	3,808	1	1			
3	Do. do. on Fuel ...	158	11	5			
4	Do. do. on Charcoal ...	60	0	0			
5	Do. do. on Watering ...	64	0	0			
6	Oil, grease, &c.	549	10	4			
7	Repairs, including Workshop	484	9	4			
8	Miscellaneous	484	10	0			
					6,072	4	7
	A. Total current charges	6,072	4	7			
	B. Add cost of establishment and maintenance during recess	...	...	...			
	C. Add Capital outlay on Machinery ...	607	3	7			
					6,679	8	2
	Total out-turn of marketable timber 33,842 cubic feet.						
	Total charges per 100 cubic feet marketable timber ...	19	11	9			

148. In 1881-82, excluding capital Charges, the cost of conversion came to Rs. 8-11-0 per 100 cubic feet, whereas the rate for conversion, including Capital charges for the year under report, is Rs. 19-11-9 per 100 cubic feet, a rate which is considerably higher than it ever has been before. The two chief causes which gave rise to this increased cost of working is explained thus :—

Firstly,—that only during a part of the year was the machinery worked, namely, 187 days, and then only on an average of 9 hours daily; and *secondly*,—that the machinery was allowed to fall into disrepair, and the boilers to become

leaky and choked with sediment. The officer under whose management this state of affairs was allowed to develop has since been transferred from the Central Provinces.

The machinery has been dismantled and is now undergoing cleaning and repair.

Carting to Depot.

149. The following work was completed during the year:—

Brought from forests to depot Allapilly; 135 logs, measuring 2,673 cubic feet.

From Allapilly to Donarghat, a distance of 60 miles on the Waingunga river; 18,355 cubic feet.

To Warora sale depot; 2,547 cubic feet and 380 teak fellies.

To Kirmurri transit depot; 11,277 cubic feet.

Of this last quantity 2,508 cubic feet were conveyed by Government carts and the remainder by hired carriage. The bulk of the timber sent up from Allapilly consisted of sleepers, both broad and narrow gauge.

Floating up river.

150. 6,716 teak and saj sleepers measuring 11,189 cubic feet were landed at Tidighat at a cost of Rs. 18 and Rs. 12 per 100 sleepers respectively. For one lot of 1,300 saj sleepers Rs. 24 per hundred was paid, because the contractor supplied his own material for buoyage; and 20,345 cubic feet of timber reached Thapad from the lower stations of Donarghat and Kurasowlee. Owing to the insufficiency of teak sleepers to float the saj sleepers with, it was found necessary to send back 2,181 teak slabs from Thapad to Donarghat a distance of 32 miles.

151. On the whole the out-turn of work during the year is small as compared with what had been done during the previous year. The difficulties of procuring carriage, for transport operations by land, were intensified, because of reduction in rates during the year, which re-acted by driving off the works much of the available carriage of the district.

152. The total cost of timber operations in the Chanda Division amounted to Rs. 25,551, and the sum realized by sales during the year was Rs. 27,418.

Saugor Division.

153. Operations undertaken by Departmental agency were small in this Division, the only produce extracted were 615 injured teak poles, which gave little promise of becoming any better. These cuttings were distributed over portions of the Tigora and Rangir reserves. A small quantity of undergrowth, comprising some of the less valuable species, was also cut away in a portion of the Tigora reserve to supply material for charcoal burning by iron smelters; and in Garhakota a few bambus were extracted. The cost of these operations was Rs. 10-8-0. The value of sales being Rs. 346.

SECOND CLASS RESERVES.

Wardha Division.

154. The produce collected by Departmental agency will be seen by the following Statement:—

		No.			No.
Teak poles	...	2,461	Grass	Poolas	260,683
Teak stumps	...	131	Mohwa and chironji.	Mds.	92
Poles other than teak...		475	Lac, gum, &c. ...	„	21
Berkanas	...	16,561	Kosa ...		92
Firewood and charcoal.	...	Mds. 1,277	Hides ...		2

The cost of these operations was Rs. 1,198, and the value of sales during the year was Rs. 4,857.

155. Departmental timber operations have been carried on in this division during the past two years. Saj to the number of 198 logs and 38,537 bambus were collected and floated down the Waingunga river to depot at Madgi with the view of obtaining better prices for this material. The total cost of the operations was Rs. 154, and the value of sales during the past two years has amounted to Rs. 885, while a balance of stock to the value of Rs. 1,482 remained on hand at the close of the year 1882-83.

Balaghat Division.

156. The only operation carried out was the collection of Hurra, of which 3,921 maunds were collected through Departmental agency. The cost of collection was Rs. 1,116-5-10, while the value of sales was Rs. 4,656-15-0, thus showing a profit of Rs. 3,540-9-2, on the transaction.

Mandla Division.

157. Only 5 maunds of lac were collected, but operations for increasing the future crop of lac were undertaken.

Betul Division.

(2.)—REMOVAL OF PRODUCE BY PURCHASERS.

158. The following is a summary of the produce removed by purchasers from 1st and 2nd Class reserves; in the case of the latter only some divisions have furnished returns to this office:—

Summary of produce removed.

Description.	Number or pieces.	Cart-load.		Bullocks and pony loads.	Banghy loads.	Jothi loads.	Head loads.	Cubic feet.	Maunds.
		2 Bullocks.	4 Bullocks.						
Teakwood ...	16,334	10,841	...	...	...	2,628	39	..	...
Other wood for house building and agricultural purposes ...	1,72,704	42,757	34	17,066	...	3,525	1,66,450	2,396	...
Firewood ...	100	1,21,379	469	20,354	192	3,269	4,63,667	...	11
Charcoal ...	...	737	...	837	33	...	49,952	...	...
Bambus ...	47,61,227	7,105	...	1,576	...	...	65,580	...	...
Materials made of bambu ..	7,26,954	50	...	...	...	...	7,053	...	...
Grass poolas ...	12,57,021	31,816	2,591	6,380	170	...	1,00,338	...	...
Other minor produce.	3,215	16,537	58	2,258	598	...	13,935	4,600	6,299
Lime, kunker, &c. ...	...	301	...	26	...	...	...	3,500	13,188
Hides and skins ..	625	...	...	298	...	...	1,278	...	...
Horns ...	362	3	...	24	...	...	89	...	1

159. The following abstract show the produce removed from each Division, 1st and 2nd Class reserves, respectively:—

Abstracts by Divisions.

DIVISIONS.	Teakwood.				Other wood for house building and agricultural purposes.							Fire.	
	Number.	2 Bullock cart loads.	Jothi loads.	Head loads.	Number.	2 Bullock cart loads.	4 Bullock cart loads.	Bullock and pony loads.	Jothi loads.	Head loads.	Cubic feet.	Number.	2 Bullock cart loads.
1st CLASS RESERVES.													
Direction Division ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mandla ..	...	...	...	.	39	...	..	...	...	...	...	24	65
Hoshangabad ...	2,485	139	...	..	4,086	582	30	...	170	388	...	...	2,029
Betul ...	2,351	...	2,192	8	43	191	..	...	1,032	1,969	...	...	...
Nimar ...	814	10,702	436	...	425	3,095	.	...	565	1,540	...	...	3,488
Chanda ...	...	...	...	.	92,927	...	...	...	...	...	2,396	...	1,341
Seoni ...	...	...	...	..	4,229	1,367	...	...	...	3,239	...	...	11,115
Saugor ...	8,940	...	...	31	3,717	...	...	...	...	56	...	3	1,058
Total 1st Class Reserves ...	14,599	10,841	2,628	39	1,05,466	5,235	30	...	1,767	7,192	2,396	27	19,096
2nd CLASS RESERVES.													
Betul Division ...	...	...	...	...	...	7,188	...	36	487	14,411	...	...	2,977
Hoshangabad ...	864	...	...	...	7,801	5,663	4	1	588	18,230	...	...	27,975
Seoni ...	...	...	...	...	35,072	1,764	..	...	...	9,370	...	...	5,943
Saugor ..	871	...	...	...	1,818	1,689	...	562	...	27,748	...	...	31,527
Chanda ...	...	...	...	...	...	24,501	...	...	...	14,491	...	...	13,792
Nagpur ...	...	...	...	...	6,100	435	.	..	...	593	...	...	12,247
Damoh ...	...	...	...	.	16,447	279	...	16,467	683	62,940	...	73	2,944
Raipur ...	...	...	...	.	...	1,403	...	...	...	11,475	...	...	4,878
Total 2nd Class Reserves ...	1,735	...	...	..	67,238	37,522	4	17,066	1,758	1,59,258	...	73	1,02,283
Grand Total...	16,334	10,841	2,628	39	1,72,704	42,757	34	17,066	3,525	1,66,450	2,396	100	1,21,379

wood.						Charcoal.				Bambus.				Bambu materials.		
4 Bullock cart loads.	Maunds.	Bullock and pony loads.	Banghy loads.	Jothi loads.	Head loads.	2 Bullock cart loads.	Bullock and pony loads.	Banghy loads.	Head loads.	Number.	2 Bullock cart loads.	Bullock and pony loads.	Head loads.	Number.	2 Bullock cart loads.	Head loads.
...	...	...	...	...	...	...	...	...	..	11,585	...	...	...	...	...	...
...	11	...	192	...	193	...	...	...	...	17,505	...	...	...	...	...	...
252	...	...	...	...	1,434	..	...	...	...	3,96,035	...	...	...	2,260	...	...
...	...	...	...	...	18,352	...	...	...	4	37,657	...	...	...	...	..	...
...	...	...	...	...	140	...	...	...	...	5,60,573	...	...	...	73	..	...
...	...	...	...	...	24	...	...	33	1,753	9,47,714	...	...	...	7,24,621	...	...
..	...	...	...	...	11,909	...	...	...	...	8,55,695	2,328	...	4,709	...	...	...
...	...	536	...	...	2,744	...	...	...	1,689	4,827	...	...	...	...	...	...
252	11	536	192	...	34,796	...	...	33	3,446	28,37,591	2,328	...	4,709	7,26,951	...	...
...	...	622	...	230	818	2	49	.	1,052	4,50,127	...	...	470	...	..	...
217	...	1,144	...	...	36,11	92	...	...	4,042	8,33,269	...	...	...	...	50	7,053
...	..	...	...	...	46,07	554	...	..	6,052	2,76,869	218	...	4,579	...	..	...
...	...	5,477	...	4	64,317	42	679	..	7,784	3,22,208	...	...	...	...	...	...
...	...	...	...	...	65,752	47	...	...	11,223	...	4,368	...	26,361	...	...	...
...	...	...	...	...	22,534	...	...	...	...	...	77	...	4,102	...	...	...
...	...	12,575	...	3,035	1,56,172	...	109	...	16,353	41,163	9	1,576	16,707	...	...	...
...	...	...	...	...	37,084	...	...	..	...	...	105	...	8,652	...	...	...
217	...	19,818	...	3,269	4,28,871	737	837	.	46,506	19,23,636	4,777	1,576	60,871	...	50	7,053
469	11	20,354	192	3,269	4,63,667	737	837	33	49,952	47,61,227	7,105	1,576	65,580	7,26,954	50	7,053

DIVISIONS.	Grass.							
	Poolas.	2 Bullock cart loads.	4 Bullock cart loads.	Bullock and pony loads.	Bangby loads.	Head loads.	Number.	2 Bullock cart loads.
1st CLASS RESERVES.								
Direction Division ...	...	74	...	...	131	6	...	...
Mandla ..	9,41,500	...	...	...	...	...	...	...
Hoshangabad ...	3,083	107	2,587	...	...	9,187	...	134
Betul ...	...	232	...	...	...	726	...	...
Nimar ...	35,447	4,209	...	...	39	2,013	806	264
Chanda ...	...	6,188	...	...	...	1,028	...	...
Seoni ..	26,000	9,858	...	...	...	2,227	...	...
Saugor ..	...	1,725	...	5	...	8,901	1,772	...
Total 1st Class Reserves ...	10,06,030	22,413	2,587	5	170	24,088	2,578	398
2nd CLASS RESERVES.								
Betul Division ...	...	3,216	...	5,485	...	34,895	...	125
Hoshangabad ...	...	1,913	4	...	...	19,083	...	6
Seoni ...	...	...	...	...	...	...	...	...
Saugor ...	600	642	...	890	...	837	...	...
Chanda ...	...	167	...	...	...	4	...	11,939
Nagpur ...	...	1,021	...	...	...	1,907	...	...
Damoh ...	2,50,391	1	...	...	...	15,661	637	4,069
Raipur ..	...	2,443	...	...	...	3,863	...	...
Total 2nd Class Reserves ...	2,50,391	9,403	4	6,375	...	76,250	637	16,139
Grand Total	12,57,021	31,816	2,591	6,381	170	1,00,338	3,215	16,537

Other Minor Produce.						Lime Kunkur.				Hides.			Horns.				
4 Bullock cart loads.	Bullock loads.	Bangby loads.	Head loads.	Cubic feet.	Maunds.	2 Bullock cart loads.	Bullock loads.	Cubic feet.	Maunds.	Number.	Bullock loads.	Head loads.	Number.	2 Bullock cart loads.	Bullock and pony loads.	Head loads.	Maunds.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	598	88	...	10	...	...	...	...	21	...	...	...	...	...	...	...
...	...	...	315	...	361	...	...	...	...	215	1	518	343	...	...	...	...
...	...	...	...	...	3	...	...	...	...	21	...	...	19	...	...	11	...
...	120	...	663	4,600	12	...	...	3,500	...	28	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	132	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	5,844	...	...	...	13,188	20	...	...	...	...	...	...	...
...	120	598	1,066	4,600	6,230	...	...	3,500	13,188	437	1	518	362	...	...	11	1
...	1,164	...	2,819	...	5	301	26	...	...	188	297	760	...	3	24	78	...
58	964	...	1,061	...	13	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	8,989	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	10	...	...	...	51	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	2,138	...	12,869	...	69	301	26	...	...	188	297	760	...	3	24	78	...
58	2,258	598	13,935	4,600	6,299	301	26	3,500	13,188	625	298	1,278	362	3	24	89	1

(3.)—FREE GRANTS OF FOREST PRODUCE.

160. No information to record.

(4.)—SUMMARY OF PRODUCE REMOVED FROM THE FORESTS.

161.—The following Statement exhibits the information required under this head :—

Description.	No. or pieces.	Cubic feet.	Cart load. 2 Bullocks.	Cart load. 4 Bullocks.	Bullock and pony load.	Hanghy load.	Jothi load.	Head load.	Maunds.	Bundles.	Grass stacks.
Teak logs ...	...	2,258	...	...	...	...	...	...	...	...	...
„ sleepers ...	...	6,713	...	...	...	...	...	...	...	...	...
„ scantlings ...	...	926	...	...	...	...	...	...	...	...	...
„ planks ..	...	3,478	...	...	...	...	...	...	...	...	...
Sal logs ...	...	4,003	...	...	...	...	...	...	...	...	...
„ sleepers ...	...	10,394	...	...	...	...	...	...	...	...	...
„ scantlings ...	...	3,495	...	...	...	...	...	...	...	...	...
„ slabs ...	96	..	...	...	...	...	...	...	...	...	...
Logs other than teak and sal.	...	6,963	...	...	...	...	...	...	...	...	...
Sleepers do. ...	...	23,774	...	...	...	...	...	...	...	...	...
Planks do. ...	...	203	...	...	..	...	...	...	...	...	...
Scantlings do. ...	35	...	...	...	...	...	...	...	...	...	...
Boats ..	10	—	...	...	...	...	...	..	...	...	...
Teak poles and pieces ...	28,775	...	10,848	...	—	—	2,628	39	...	...	...
Sal poles ...	209	...	...	...	...	...	...	...	...	...	...
Other wood, poles and pieces for agricultural implements and house building.	1,99,087	...	42,757	34	17,066	...	3,525	1,66,450	...	...	...
Firewood ..	100	...	1,21,598	469	20,354	192	3,269	4,63,678	2,438	6	...
Charcoal ...	...	...	737	...	837	33	...	48,952	289	...	...
Bambus ..	49,57,327	...	7,146	...	1,576	...	...	65,580	...	...	...
Materials made of bambus ...	7,26,954	...	50	..	...	...	...	7,053	...	...	...
Grass poolas ...	21,60,021	...	31,816	2,591	6,380	170	...	1,00,366	...	..	1
Other Minor produce ...	6,695	4,600	16,587	58	2,258	598	...	13,935	8 42	...	...
Lime, kankur &c. ...	...	3,500	301	...	26	..	...	...	13,188	...	.
Hides and skins ...	669	...	...	...	298	...	...	1,278	...	...	...
Horns ...	362	...	8	...	24	...	...	59	11	...	...
Farm crop ..	...	...	...	...	...	...	...	...	58	2,495	.

(5.)—IMPORTS AND EXPORTS OF FOREST PRODUCE.

162. No information to record.

CHAPTER V.

Financial Results.

General.

163. The gross revenue and expenditure in the year 1882-83 will be seen by the following figures :—

Revenue	...	Rs.	9,77,647
Expenditure	...	„	4,12,248
Surplus	...	Rs.	5,65,399

In the following abstract receipts and charges for the two past years are compared:—

Particulars.		1881-82. Amount.	1881-82. Amount.	1882-83. Amount.	1882-83. Amount.
		Rs.	Rs.	Rs.	Rs.
Receipts ...	...	...	11,72,884	...	9,77,647
Charges ...	A.	3,17,743	...	2,35,545	...
	B.	1,79,270	...	1,76,703	...
			4,97,013		4,12,248
Surplus ...			6,75,871		5,65,399

164. The decrease in income for the year 1882-83 is due to less timber having been sold; the value of sales under this head having fallen from Rs. 3,10,226 in 1881-82 to Rs. 75,062 in 1882-83. The abnormal increase of receipts under this head in the previous year has already been explained in paragraph 48 of the report for that year. The surplus of that year in the 1st class reserves amounted to the sum of Rs. 1,60,149. If from this is deducted Rs. 1,20,000 realized and credited in 1881-82, on account of sales in the previous year, the net result for 1881-82 will be reduced to Rs. 40,149. The surplus for the year under review is Rs. 16,436 in the 1st class, and Rs. 5,48,963 in the 2nd class reserves.

165. Adopting the plan which was introduced last year, *vide* para. 46 of report of 1881-82, of comparing receipts and expenditure with the averages of the past three years we shall find the figures stand thus:—

	Average for past three years ending 1881-82.	For 1882-83.
Receipts	Rs. 10,09,915	9,77,647
Charges	„ 5,05,033	4,12,248
Surplus ...	„ 5,04,882	5,65,399

166. Excluding the year 1870-71, and grouping the remaining 12 years in periods of 3 years each, the average income, expenditure and surplus for each period will appear thus:—

Years.	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1871-72 to 1873-74	4,99,268	2,54,347	2,44,921
1874-75 to 1876-77	6,82,813	3,17,880	3,64,933
1877-78 to 1879-80	8,47,831	4,11,321	4,36,510
1880-81 to 1882-83	10,00,223	4,68,258	5,31,965

167. A comparative abstract Statement of financial results for the two years, arranged according to 1st and 2nd Class reserves, is given below:—

Particulars.	1881-82.			1882-83.		
	1st Class.	2nd Class.	Total.	1st Class.	2nd Class.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	4,15,679	7,57,205	11,72,884	1,87,131	7,90,516	9,77,647
Charges ...	2,55,530	2,41,483	4,97,013	1,70,695	2,41,553	4,12,248
Surplus ...	1,60,149	5,15,722	6,75,871	16,436	5,48,963	5,65,399

168. In Form No. 57 attached to this report the details of both receipts and expenditure are shown classified under the three main heads as required by the Government of India, of which the following is an abstract :—

Particulars.		Receipts.	Charges.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
I.—Departmental agency ..	1881-82 ...	3,10,176	1,38,313	1,71,863	...
	1882-83 ...	75,062	53,711	21,351	...
II.—Other revenue ...	1881-82 ...	8,62,708	2,21,152	6,41,556	...
	1882-83 ..	9,02,585	2,21,262	6,81,323	...
III.—Formation, protection and improvement of Forests.	1881-82 ...	...	1,37,548	...	1,37,548
	1882 83 ...	...	1,37,275	...	1,37,275
Total ...	1881-82 ..	11,72,884	4,97,013	6,75,871	...
	1882-83 ..	9,77,647	4,12,248	5,65,399	...

169. Both revenue and expenditure in 1882-83 in the 1st Class reserves, have fallen considerably under the Head I.—Departmental agency. Less timber was sold from the Chanda Division, while the charges in that Division connected with timber operations, were likewise reduced, owing to less work having been done. Under Head II, receipts have increased by Rs. 39,877, while the charges under the same head have remained stationary. The Statement which will be found in Appendix B. of this report, compares the details of receipts and expenditure for the year with the year previous, by Districts and Divisions, 1st and 2nd Class reserves being treated separately. While the greatest fall in both revenue and expenditure has been in the Chanda Division on account of timber worked out in the 1st Class reserves—the revenue from this source in this Division in 1881-82 was Rs 2,93,466 and in 1882-83 fell to Rs. 49,677, owing to there being no demand for sleepers and other timber—in 4 Divisions, namely Mandla, Betul, Nimar and Saugor, receipts have risen, substantially in some, while only slightly in others. In 2 Divisions, namely Hoshangabad and Seoni, receipts have fallen a little.

170. In the 2nd Class reserves increase of revenue is marked in the Districts of Bhandara, Saugor, Mandla, Betul, Hoshangabad, Nimar and Sambalpur, the increase in the case of each of these districts varying from Rs. 2,000 to Rs. 8,000 over the revenue of the year previous. In Chanda, Jubbulpore, Chhindwara and Bilaspur, the increase is slight, being about Rs 1,000 in each, whilst in the remaining districts the receipts have been less than in the previous year.

171. The following is an abstract of the Statement Appendix B. already referred to:—

Divisions.	Receipts.		Charges.		Surplus.		Deficit.	
	1881-82	1882 83.	1881-82.	1882 83.	1881-82.	1882-83.	1881-82	1882-83
1st Class Reserves.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction ..	1,773	2,634	39,601	39,344	...	...	37,828	36,710
Mandla ..	26,035	34,846	39,481	38,396	...	...	13,446	3,550
Hoshangabad ...	25,788	25,465	11,436	9,746	14,352	15,719	...	...
Betul ...	10,650	13,854	6,412	6,945	4,238	6,909	...	...
Nimar ...	21,444	27,052	27,526	21,477	.	5,575	6,084	...
Chanda ..	2,93,466	49,677	1,26,743	43,810	1,66,723	5,867	...	...
Seoni ...	26,742	24,987	13,649	14,066	13,093	10,921	...	...
Saugor ...	8,427	8,615	7,154	5,095	1,273	3,520	...	...
Total ...	4,14,325	1,87,130	2,72,002	1,78,879	1,42,321	8,251	...	...
2nd Class Reserves.								
Nagpur ...	28,712	28,103	15,053	15,620	13,659	12,483	...	...
Bhandara ...	44,860	53,225	12,780	7,209	32,080	46,016	...	...
Wardha ...	28,885	25,330	16,407	11,964	12,478	13,366	...	...
Chanda ..	84,039	85,052	19,557	19,708	64,532	65,344	...	...
Balaghat ..	36,486	36,005	9,018	9,758	27,468	26,247	...	...
Jubbulpore ...	18,786	19,487	5,103	5,088	13,683	14,399	...	...
Saugor ...	55,399	60,975	20,861	20,133	34,538	40,842	...	...
Damoh ...	65,671	62,486	12,804	13,678	52,867	48,808	...	...
Seoni ...	50,441	48,852	14,516	15,913	35,925	32,939	...	...
Mandla ..	83,334	91,245	15,303	15,781	68,031	75,464	...	...
Hoshangabad ..	51,315	58,190	20,600	22,770	30,715	35,420	...	...
Nimar ...	42,555	45,923	21,880	21,491	20,675	24,432	...	...
Betul ..	35,981	41,572	12,451	13,019	23,530	28,553	...	...
Narsinghpur ..	14,900	14,699	3,315	3,712	11,585	10,987	...	...
Chhindwara ..	29,360	29,977	7,878	8,232	21,482	21,745	...	...
Raipur ...	57,833	54,548	8,449	13,213	49,384	41,335	...	...
Bilaspur ...	20,276	20,391	4,110	6,842	16,166	13,549	...	...
Sambalpur ...	9,677	14,457	4,926	9,238	4,751	5,219	...	...
Total ...	7,58,560	7,90,517	2,25,011	2,33,369	5,83,549	5,57,148	...	...
Grand Total ...	11,72,865	9,77,647	4,97,013	4,12,248	6,75,870	5,65,399	...	...

CHAPTER VI.

General Remarks.

172. The submission of this report has been long delayed, owing to unavoidable causes. The report for 1881-82 was submitted on 26th August 1882, and this one goes in on 17th September 1883. I am sensible that the orders of the Government of India, which fixed 1st September as the date by which all Forest Administration Reports were to reach Simla, have in the case of the Central Provinces again not been carried out. The remarks which Major Doveton has recorded in paragraph 288 of the report for 1881-82, sufficiently explained the difficulties which, in his case, delayed the submission of the report. Those difficulties still exist, and in my case they were intensified, because of the want of personal knowledge of the details of Forest administration in the past year. These details could only be acquired from Division and District Reports,

and from the Annual Forms and Returns, which took long in reaching the Conservator's office; where they underwent comparison and check, and from whence they had frequently to be referred back for further explanation or correction of error; and it has been possible only within the last few days, by the return of all these Statements, for the Conservator's Annual Forms to be compiled from them. However, no time has since been lost in writing the report, and in arranging the subjects to be reviewed under the new chapters and sub-heads laid down in the orders of Government of India, dated 2nd May 1883.

173. To prevent a recurrence of delay in the submission of future reports steps will shortly be taken to lay before the Administration proposals for rectifying some of the existing defects in Divisional and District offices—owing to which defects the compilation and final check of the Annual Returns in the Conservator's office have been delayed hitherto.

174. As regards the services of Forest Officers, I regret that my wantot personal knowledge will not allow me to say anything on the subject. I took charge of the Office of Officiating Conservator on 15th May last, and my personal knowledge of matters, therefore, dates from that period. I will, however, say that the annual Reports received from Divisions amply testify to the good work done, during the year, by the Forest Officers as a body.

R. H. E. THOMPSON,

Offg. Conservator of Forests,

Central Provinces.

Form No.	List of Appendices to the Forest Report.
49	Area of 1st class reserved forests.
49 A	Area of 2nd class do.
49 B	Area of unreserved forests.
51	Area of forest tracts protected from fire.
52	Prosecutions for breaches of forest rules.
53	Summary of revenue and expenditure.
54	Account current.
55	Out-standings and liabilities on account of contractors and disbursers.
56	Out-standings on account of revenue.
57	Financial results.
58	Trees felled by Government agency.
59	Out-turn of timber, &c, cut and collected by Government agency.
60	Timber, &c., received in sale depots.
61	Do. &c., cut and collected by Government agency, sold from depots and locally.
62	Account of timber &c., in depots and sold locally.
63	Timber, &c. removed from the forests by purchasers.
64	Revenue derived from and expenditure incurred on timber, &c., supplied to public departments.
65	Value of timber and produce at sale depots, including value of live and dead stock.
A	Comparative Statement showing the result of fire protection.
B	Statement showing receipts and charges of each division and district. Statement of forest buildings.

Annual Form No. 49—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1882-83.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1882.		Added during the year.	Excluded or transferred to other heads.	Area on 1st March 1883.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Direction Division.	Bilaspur District...	Hathibari ..	2,123	3	...	...	2,123	3		
	Raipur „ ..	Kuntranala ...	3,548	6	...	..	3,548	6		
Mandla Division.	Mandla District ..	Jugmandal ...	24,503	38	...	...	24,503	38		
	Do. ...	Chuharigogarh.	1,660	3	...	...	1,660	3		
	Do. ..	Banjar valley..	49,724	78	...	...	49,724	78		
	Do. ...	North Phen ..	6,435	10	...	...	6,435	10		
	Do. ..	South Phen .	45,967	72	...	...	45,967	72		
	Do. ...	Moti Nala ...	1,658	3	...	...	1,658	3		
	Do. ..	Airi ..	2,150	3	...	...	2,150	3		
	Do. ..	Barela ...	7,153	11	...	...	7,153	11		
	Balaghat District	Keolikapa ...	6,296	10	...	...	6,296	10		
	Do.	Topla ..	45,506	71	...	...	45,506	71		
	Jubbulpore District ...	Bijragogarh ...	21,188	33	...	...	21,188	33		
	Do. ...	Lower Gour ...	5,517	9	...	...	5,517	9		
	Damoh District ...	Singrampur ...	6,555	10	...	...	6,555	10		
Hoshangabad Division.	Hoshangabad District ..	Rajaborari ...	1,61,645	253	...	...	1,61,645	253		
	Do. ...	Bori ...	39,680	62	...	...	39,680	62		
	Hoshangabad and Betul Districts.	Saonligarh ...	94,041	147	2,880	...	96,921	151	Chief Comr's. letter No 1285-70, dated 30th March 1883.	Transferred from 2nd Class Reserves.
Betul Division.	Betul District ...	Bowergarh ...	75 520	118	...	...	75,520	118		
	Do. ...	Khamapur ...	1,08,012	169	...	...	1,08,012	169		
Nimar Division.	Hoshangabad District ...	Kalibhert ...	1,66,400	260	...	...	1,66,400	260		
	Nimar District ...	Punassa ...	91,720	143	...	...	91,720	143		
	Do. ...	Chandgarh ...	61,440	96	...	...	61,440	96		
	Do. ...	Khandwa ...	35,840	56	...	...	35,840	56		
Chanda Division.	Ahiri Zamindari in Chanda District.	Bimarum ..	12,296	19	...	...	12,296	19		
	Do. .	Mirkalloo ..	8,479	13	...	...	8,479	13		
	Chanda District ...	Moharli ...	2,29,498	359	114	...	2,29,612	359	Chief Comr's. Notification No, 3657, dated 25th September 1882.	Transferred from Unreserved forests.
Seoni Division.	Balaghat and Seoni Districts ...	Sonawani ...	52,520	82	...	...	52,520	82		
		Korai ...	62,770	98	...	...	62,770	98		
	Seoni and Nagpur Districts ...	East Pench ...	1,23,464	193	...	...	1,23,464	193		
	Chhindwara and Nagpur Districts	West Pench ...	60,938	95	...	...	60,938	95		
Saugor Division.	Saugur District ..	Garhakota ...	2,899	5	...	...	2,899	5		
	Do. ..	Tigora ...	459	1	...	...	459	1		
	Do. ...	Rangir ...	11,036	17	...	...	11,036	17		
	Do. ...	Ranipura ...	8,109	13	...	...	8,109	13		
	Do. ...	Hathkho ...	19,492	30	...	...	19,492	30		
		Total ...	16,56,241	2,588	2,994	...	16,59,235	2,593		

Annual Form No. 49 A.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 2nd Class Forests, 1882-83.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1882.		Added during the year.	Excluded or transferred to other heads.	Area on 1st March 1883.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nagpur Division ...	Nagpur ...	2nd Class Reserves.	2,49,785	390	...	...	2,49,785	390		
Civil officer ...	Bhandara ...	Do.	3,52,640	55	...	...	3,52,640	551		
Chanda Division ...	Chanda ...	Do.	19,05,399	2,977	...	...	19,05,399	2,977		
Civil officer ...	Wardha ..	Do.	1,28,034	200	...	...	1,28,034	200		
Do. ...	Balaghat ...	Do.	6,08,089	950	...	...	6,08,089	950		
Do. ...	Jubbulpore ..	Do.	2,10,502	329	...	...	2,10,502	329		
Saugor Division ...	Saugor ...	Do.	4,74,488	742	...	...	4,74,488	742		
Civil officer ...	Damoh ..	Do.	5,34,743	835	...	...	5,34,743	835		
Seoni Division ...	Seoni ...	Do.	3,54,306	554	...	...	3,54,306	554		
Civil officer ...	Mandla ...	Do.	14,00,212	2,188	...	...	14,00,212	2,188		
Betul Division ...	Betul ...	Do.	5,45,452	852	30	...	5,45,482	852		Correction of areas.
Civil officer ...	Chhindwara ...	Do.	4,10,412	641	...	...	4,10,412	641	...	
Hoshangabad Division ...	Hoshangabad ...	Do.	7,61,064	1,189	...	2,880	7,58,184	1,185	Chief Comr's letter No. 1285-70, dated 30th March 1883.	Transferred to the 1st Class Reserves.
Civil officer ...	Narsinghpur ...	Do.	1,23,712	193	...	...	1,23,712	193		
Nimar Division ...	Nimar ...	Do.	9,65,486	1,509	...	...	9,65,486	1,509		
Civil officer ...	Raipur ...	Do.	8,81,280	1,377	...	...	8,81,280	1,377		
Do. ...	Sambalpur ...	Do.	4,57,600	715	...	...	4,57,600	715		
Do. ...	Bilaspur ...	Do.	4,15,360	649	...	...	4,15,360	649		
		Total ...	1,07,78,573	16,842	30	2880 + 9	1,07,75,714	16,837		

Annual Form No. 49 B—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Unreserved Forests, 1882-83.

Division or Range.	Civil District or Territory.	Name of Forest	Area on 1st April 1882.		Added durng the year.	Excluded or transferred to other heads.	Area on 1st March 1883.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Seoni Division ...	Seoni District ...	Unreserved Forest.	1,25,587	196	...	...	1,25,587	196		
Nagpur Do. ...	Nagpur do. ...	Do.	5,000	8	...	...	5,000	8		
Chanda Do. ...	Chanda do. ...	do.	114	...	...	114	...	...	Chief Commr's. Notification No. 3657, dated 25th Sept. 1882	Transferred to the 1st Class Reserves.
Civil Officer. ...	Damoh do. ...	do.	14,413	22	184	184	14,413	22	Chief Commr's. letter No. $\frac{1242}{64}$ dated 13th April 1882, and No. $\frac{2527}{136}$ dated 12th July 1882.	Result of exchange.
Do. ..	Balaghat do. ...	do.	38,729	61	17,730	2,070	54,389	85	Do. do. No. $\frac{2070}{110}$ dated 14th June 1882 and No. $\frac{2718}{142}$ dated 22nd July 1882.	Do. & Forest land the right in which has reverted to Government.
Do. ...	Chhindwara do. ...	do.	1,227	2	2,732	...	3,959	6		Ditto.
		Total ...	1,85,070	289	20,646	2,368	2,03,348	318		

Form No. 51.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Forest tracts protected from fire during the dry season of 1883,—to accompany Report for 1882-83.

Division.	Forest tracts.		Up to 30th June 1882.		During dry season of 1883.				Total cost up to 30th June 1883.	Year in which protection commenced.
			Area actually protected.	Total cost.	Area attempted to be protected	Failures.	Actually protected	Amount expended.		
			Acres.	Rs. a. p.	Acres.	Acres.	Acres.	Rs. a. p.	Rs. a. p.	
	1st CLASS RESERVES.									
Direction Division ...	Hathibari ...	..	2,123	2,840 4 3	2,123	...	2,123	86 12 8	2,927 0 11	June 1870
	Kuntranala ...	...	...	272 10 0	3,548	2,883	665	69 12 4	342 6 4	„ 1876
Mandla Division ...	Banjar valley ...	...	49,490	3,876 10 5	49,495	...	49,495	596 14 1	4,473 8 6	„ 1875
	Motinala ...	...	1,659	336 4 11	1,659	...	1,659	56 14 3	393 3 2	„ 1875
	Jugmandal ...	...	24,340	19,433 13 5	24,503	1,600	22,903	613 1 4	20,046 14 9	„ 1867
	Chuharigogarh ...	...	1,661	4,814 6 11	1,661	...	1,661	73 7 4	4,887 14 3	„ 1867
	Barela ...	...	7,153	1,527 4 11	7,153	156	6,997	162 6 2	1,689 11 1	„ 1872
	Airi ...	...	2,150	78 9 6	2,150	...	2,150	43 4 9	121 14 3	„ 1878
	Singrampur ...	...	6,550	2,027 5 7	6,555	...	6,555	167 11 9	2,195 1 4	„ 1871
	Bijeragogarh ...	..	21,188	5,180 6 9	21,188	...	21,188	481 13 6	5,662 4 3	„ 1871
	Lower Gour, Paraspani block	...	2,000	71 14 9	2,000	...	2,000	73 2 7	145 1 4	„ 1882
Hoshangabad Division.	Rajaborari, Machak „	...	9,800	...	10,240	300	9,940			„ 1875
	Do. Gunjal „	...	53,880	3,422 2 6	54,080	...	54,080	763 9 10	4,185 12 4	„ 1875
	Do. Ajnal „	...	38,390	...	38,400	300	38,100			„ 1875
	Saonligarh, Dehkna „	...	46,720	2,163 0 2	49,920	806	49,114	629 0 2	2,792 0 4	„ 1875
	Do. Tokra „	...	17,920	...	28,160	...	28,160			„ 1875
	Bori, Bori „	...	23,680	14,352 10 8	23,680	120	23,560	571 12 0	14,924 6 8	„ 1864
	Do. Dhain „	...	13,120		16,000	...	16,000			„ 1879
Nimar Division ..	Kalibhit, Jai Malor „	...	61,811	1,327 0 7	62,080	122	61,958	335 6 3	1,662 6 10	„ 1874
	Punassa, Black No. I	...	7,110	...	7,680	...	7,680			„ 1875
	Do. „ „ II	...	...	...	9,720	...	9,720			„ 1875
	Do. „ „ III	...	...	...	6,680	..	6,680			„ 1875
	Do. „ „ IV	...	...	...	9,840	145	9,695			„ 1875

	Do.	„ No. V	...	...	5,219	12	1	9,600	30	9,570	1,026	9	5	6,246	5	6	June	1875
	Do.	„ „ VI	...	...	...			10,880	50	10,830							„	1877
	Do.	„ „ VII	...	...	...			9,180	...	9,180							„	1879
	Do.	„ „ VIII	...	...	...			8,500	151	8,349							„	1880
	Do.	„ „ IX	...	...	...			8,960	2,000	6,960							„	1881
	Do.	„ „ X	...	...	...			10,880	2,240	8,640							„	1882
	Chandgarh,	Whole	...	54,145	1,944	12	1	61,440	268	61,172	536	1	3	2,480	13	4	„	1878
	Khandwa	„	...	33,584	3,395	11	10	35,840	1,152	34,688	641	1	5	4,036	13	3	„	1878
Betul Division ...	Bowergarh,	Part	..	28,054	3,852	15	3	38,720	1,558	37,162	787	14	6	4,640	13	9	„	1875
	Khamapur	„	...	16,000	866	3	3	16,000	...	16,000	263	8	3	1,129	11	6	„	1875
Chanda Division ...	Bemarum,	Whole	...	12,296	11,119	3	5	12,296	...	12,296	1,198	11	9	12,317	15	2	„	1873
	Mirkalloo	„	...	8,479	6,875	10	8	8,479	320	8,159	1,419	6	4	8,295	1	0	„	1875
	Taroba block	„	...	25,509	8,830	14	0	25,619	...	25,619	1,138	7	3	9,969	5	3	„	1873
	Goverdun	„	...	13,931	4,900	12	8	13,931	...	13,931	617	11	2	5,518	7	10	„	1874
Seoni Division ...	Korai Range	Korai block	...	31,210	8,142	2	11	31,210	...	31,210	532	15	4	8,675	2	3	„	1869
	Do.	Sakata „	..	10,020	542	5	4	10,020	...	10,020	171	1	5	713	6	9	„	1880
	East Pench	Part only	...	42,580	4,685	8	1	42,580	...	42,580	616	14	5	5,302	6	6	„	1875
	West „	Nagulwari block	..	9,680	911	7	3	9,680	...	9,680	114	2	0	1,025	9	3	„	1878
	Do. „	Paraspani „	..	8,240	250	12	0	8,240	...	8,240	97	7	11	348	3	11	„	1879
	Do. „	Narhur „	...	37,040	734	5	4	39,040	...	39,040	461	14	3	1,196	3	7	„	1881
Saugor Division ..	Garhakota,	Whole	...	2,894	121	8	1	2,899	...	2,899	10	0	0	131	8	1	„	1875
	Hathkho	Part only	...	10,598	2,009	7	2	10,598	...	10,598	232	14	4	2,242	5	6	„	1875
	Rangir	„	...	1,987	120	2	4	1,987	90	1,897	40	5	0	160	7	4	„	1875
	Ranipura	„	...	2,720	248	1	5	2,720	...	2,720	79	12	8	327	14	1	„	1879
	Tigora	„	...	...	.....			459	...	459	2	8	0	2	8	0	„	1879
	Total 1st Class Reserves		...	7,39,712	1,26,496	4	6	8,68,273	14,291	8,53,982	14,714	7	8	1,41,210	12	2		
	2ND CLASS RESERVES.																	
Nimar Division ...	Bainpura	Whole	...	600	62	9	0	600	...	600	11	1	6	73	10	6	„	1879
	Gunjari	„	..	3,500	168	1	6	3,500	...	3,500	45	15	11	214	1	5	„	1879
	Undri Booria	„	...	3,092	74	2	3	3,100	...	3,100	34	12	8	108	14	11	„	1879
	Bhojwa Beheria	„	...	2,000	88	1	7	2,000	...	2,000	41	4	0	129	5	7	„	1879
	Ajnal	„	...	1,500	121	5	9	1,500	8	1,492	20	7	6	141	13	3	„	1879
	Chooria	„	..	170	10	14	0	170	...	170	...	...	...	10	14	0	„	1880
	Carried over		...	...	...			...	...	...	...			...				

Form No. 51.—(Continued).

FOREST DEPARTMENT, CENTRAL PROVINCES.

Division.	Forest tracts.	Up to 30th June 1882.		During dry season of 1883.				Total cost up to 30th June 1883.	Year in which protection commenced.	Remarks.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected	Amount expended.			
		Acres.	Rs. a. p.	Acres.	Acres.	Acres.	Rs. a. p	Rs. a. p.		
	Brought forward ...									
	2ND CLASS RESERVES—(Contd.)									
Saugor Divison ...	Jalundhar " ...	2,885	82 12 5	2,885	...	2,885	116 13 10	199 10 3	June 1880	
Balaghat Division ...	Pandratola " ...	4,320	266 0 10	4,817	360	4,457	55 1 3	321 2 1	" 1872	
Wardha Division ...	Dhuga " ...	13,184	788 37	14,171	8,000	6,171	531 12 9	1,320 0 4	" 1880	
	Erjhar " ...	10,759		11,911	300	11,611			" 1880	
	Total 2nd Class Reserves ...	42,010	1,662 2 11	44,654	8,668	35,986	857 5 5	2,519 8 4		
	Grand Total ...	7,73,893	1,28,158 7 5	9,12,927	22,959	8,89,968	15,571 13 1	1,43,730 4 6		

Charged in previous years ...	1,20,886 15 2
Charged in 1882-83 ...	13,815 14 8
Charged in 1883-84 ...	9,027 6 8
Total ...	1,43,730 4 6

Annual Form No. 52.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest Rules during 1882-83.

Forest Division and Civil District.	Cases pending from 1881-82.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1st Class Reserves.														
Direction Division ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mandla " ...	1	1	2	...	1	4	5	4	20	1	1	5	21	...
Hoshangabad " ...	...	1	3	...	...	4	4	3	3	...	..	3	3	1 offender absconded.
Betul " ...	...	...	3	...	...	3	3	3	5	...	..	3	5	...
Nimar " ..	..	2	1	...	1	4	4	4	7	...	...	4	7	...
Chanda " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Seoni " ...	...	...	8	5	...	13	13	10	16	3	3	13	19	...
Saugor " ..	...	1	...	...	1	2	2	2	2	...	...	2	2	...
Total ...	1	5	17	5	3	30	31	26	53	4	4	30	57	1
2nd Class Reserves.														
Nagpur ...	...	...	1	...	...	1	1	1	1	...	...	1	1	...
Bhandara ..	...	...	35	10	4	49	49	47	140	2	8	49	148	...
Wardha ...	...	...	16	2	...	18	18	12	28	6	12	18	40	...
Chanda ...	...	...	47	17	..	64	64	48	100	16	61	64	161	...
Balaghat ...	...	...	16	...	...	16	16	14	51	2	3	16	54	...
Jubbulpore ..	...	2	30	5	3	40	40	19	51	21	69	40	120	...
Saugor ...	..	...	2	1	...	3	3	3	4	...	...	3	4	...
Damoh ...	...	1	13	...	...	14	14	11	28	3	5	14	33	...
Seoni ...	...	...	24	1	3	28	28	25	45	3	8	28	53	...
Mandla ...	...	...	127	...	...	127	127	124	171	3	11	127	182	...
Betul ...	...	...	7	...	...	7	7	6	9	1	1	7	10	...
Chhindwara ...	...	...	12	...	...	12	12	9	23	3	6	12	29	...
Hoshangabad ...	...	...	51	6	...	57	57	51	93	6	17	57	110	...
Narsinghpur ...	...	...	...	..	...	..	...	...	...	...	..	..	...	...
Nimar ...	...	...	24	34	1	59	59	54	85	3	4	57	89	2
Raipur ...	...	...	26	...	..	26	26	22	72	4	20	26	92	...
Sambalpur ...	...	...	75	2	...	77	77	71	71	6	6	77	77	...
Bilaspur ...	...	...	7	...	...	7	7	6	21	1	4	7	25	...
Total ...	...	3	513	78	11	605	605	523	993	80	235	603	1,228	2
Grand Total ...	1	8	530	83	14	635	636	549	1,046	84	239	633	1,285	3

Annual Form No.

FOREST DEPARTMENT,

Summary of Revenue of the different

Budget Heads Receipts.	Direction.	Balaghat District.	Betul Division.	Bhandara District.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forest by Government agency :—				
a. Timber	.....	55 13 6	260 2 6	.....
b. Firewood and Charcoal ...	69 2 8	84 15 0	.....	....
c. Bamboos	.....	615 1 7	.....	632 12 0
d. Sandal-wood	.....	.....	.....	.....
e. Grass and other Minor Produce ..	.....	179 6 3	21 15 0	.....
II.—Timber and other produce removed from the forests by consumers or purchasers:—	.....	14,216 4 10	.....	.....
a. Timber	.....	704 6 8	10,839 0 0	5,042 11 11
b. Firewood and Charcoal ...	.....	3,552 9 9	4,965 9 0	15,531 13 11
c. Bamboos	72 6 6	2,032 5 10	6,045 9 3	1,912 4 3
d. Grazing and Fodder grass ...	23 5 9	10,510 13 6	24,129 15 11	20,248 1 1
e. Other Minor Produce ..	.....	3,913 6 8	7,285 3 6	2,158 13 1
III.—Confiscated, drift and waif wood ...	.....	10 13 6	0 7 0	789 10 9
IV.—Revenue from forests not managed by Government:—				
a. Duty on Foreign Timber and other forest produce ..	.....	.....	.....	.....
b. Revenue from Shared and Private Forests	.....	.....	.....	6,415 8 0
V.—Miscellaneous :—				
a.—Fines and Forfeitures ...	.....	90 0 10	.....	492 13 0
b.—Refunds	42 0 0	38 6 7	.....	.....
c.—Other Sources	2,427 3 11	.....	1,878 9 0	.....
Total Receipts ...	2,634 2 10	36,004 8 6	55,426 7 2	53,224 8 0
BUDGET HEADS.				
I.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency :—				
a. Timber ...	.....	2 10 0	.....	.....
b. Firewood and Charcoal ...	.....	.....	.....	.....
c. Bamboos ...	.....	.....	.....	.....
d. Sandal-wood ..	.....	.....	.....	.....
e. Grass and other Minor Produce ...	21 3 4	.....	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers... ...	.....	7,481 1 1	7,910 1 6	7,084 15 0
III.—Confiscated, drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government :—				
a. Duty on Foreign timber and other forest produce ..	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....	.....
V—.—Rent of leased forests, and payments to shareholders in forests managed by Government ...	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant:—				
a. Purchase of Cattle ...	.....	.....	.....	.....
b. Feed and keep of Cattle ...	425 0 0	.....	.....	.....
c. Stores, Tools and Plant ...	12 5 0	.....	99 14 3	.....

53.—[*Prescribed.*]

CENTRAL PROVINCES.

Divisions, for the year 1882-83.

Bilaspur District.	Chanda Division.	Ohhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore District.	Mandla Division.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	26,406 2 2	.....	.....	1,908 6 0	.....	26,953 5 0
.....	.....	.....	.....	53 4 0	.....	276 4 6
.....	555 8 5	.....	.....	4 8 0	.....	708 11 5
.....	.....	.....	.....	.....	.....	.....
.....	456 11 7	.....	.....	32 2 9	.....	4,494 8 4
.....	13,138 5 9	.....	4,515 8 1	4,514 4 0	.....	.....
6,249 3 8	8,037 6 9	5,421 1 6	7,917 0 6	21,638 9 9	2,085 3 3	11 6 0
1,470 5 0	12,397 11 4	2,328 9 9	4,687 2 6	5,042 6 5	2,922 13 1	37 14 3
2,531 13 10	17,533 0 1	3,146 11 1	1,622 9 11	12,143 4 9	1,559 4 0	157 13 2
4,230 13 0	45,739 0 10	15,839 6 0	30,457 4 2	28,690 13 8	11,128 2 6	1,563 12 7
2,010 6 11	9,583 1 11	2,991 13 0	13,115 5 10	6,295 10 7	1,593 4 6	94 1 10
.....	.....	222 7 0	4 2 0	452 6 9	112 12 3	234 5 0
.....	.....	.....	.....	.....	.....	.....
3,312 7 7	.....	.....	.....	.....	.....	.....
.....	5 0 0	26 12 3	67 2 0	220 13 3	5 9 0	144 4 6
0 3 0	3 7 2	.....	.....	10 10 4	13 15 10	18 0 0
585 12 8	873 1 2	.....	99 11 2	2,647 14 10	65 8 1	151 6 0
20,391 1 8	1,34,728 9 2	29,976 12 7	62,485 14 2	83,655 3 1	19,486 8 6	34,845 12 7
.....	25,251 0 8	.....	.....	707 5 9	.....	8,016 14 3
.....	.....	.....	.....	.....	.....	130 12 9
.....	158 13 5	.....	.....	.....	.....	425 4 4
.....	.....	.....	.....	.....	.....	.....
.....	141 9 1	.....	.....	2 5 4	.....	934 8 7
2,758 10 10	13,278 0 0	7,853 8 11	12,399 3 4	12,784 11 1	4,356 7 11	.....
.....	.....	.....	.....	.....	.....	177 3 1
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	463 6 8
.....	1,703 1 6	.....	.....	524 4 9	.....	2,091 12 2
.....	260 2 4	.....	.....	126 2 0	.....	43 1 3

Budget Heads Receipts.	Mandla District.	Nagpur Division,	Narsinghpur District.	Nimar Division.
RECEIPTS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I:- Timber and other produce removed from forests by Government agency :—				
a. Timber	.....	.....	.....	700 0 3
b. Firewood and Charcoal ...	.....	.....	.....	107 12 0
c. Bamboos	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....
e. Grass and other Minor Produce ...	3,028 4 8	.....	.....	207 7 9
II.—Timber and other produce removed from the forests by consumers or purchasers—	13,125 5 6	.....	.....	12,376 3 0
a. Timber	2,359 4 1	4,837 15 0	3,754 15 3	14,246 3 7
b. Firewood and Charcoal ...	1,063 9 2	3,842 14 3	2,294 11 0	2,641 15 6
c. Bamboos	2,213 12 2	833 2 9	2,084 15 3	8,112 5 10
d. Grazing and Fodder Grass ...	58,435 11 4	15,579 5 6	5,225 0 0	29,242 0 6
e. Other Minor Produce ...	10,118 3 11	1,650 0 0	1,223 10 9	1,694 10 7
III.—Confiscated, drift and waif wood ...	901 1 1	1.001 0 0	.....	271 3 10
IV.—Revenue from forests not managed by Government—				
a. Duty on Foreign Timber and other Forest produce ...	.....	.....	.....	.....
b. Revenue from Shared and Private forests	.....	.....	.....	.....
V.—Miscellaneous—				
a. Fines and Forfeitures ...	.....	95 3 6	115 9 9	311 10 (
b. Refunds	.....	50 15 1	.....	67 8 !
c. Other Sources	.....	192 5 5	.....	2,996 5 !
Total Receipts ..	91,245 3 11	28,102 13 6	14,698 14 0	72,975 6 9
BUDGET HEADS.				
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency :—				
a. Timber	.....	.....	.....	2 12 0
b.—Firewood and Charcoal ...	.....	.....	.....	4 5 7
c.—Bambus	.....	.....	.....	.....
d.—Sandal-wood	1,116 5 10	.....	.....	.....
e.—Grass and other Minor Produce...	13,734 8 6	.....	.....	22 12 0
II.—Timber and other produce removed from the forests by consumers or purchasers ...	.....	7,850 9 10	3,196 9 2	13,208 2 4
III.—Confiscated, drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government :—				
a.—Duty on Foreign timber and other forest produce ...	.....	.....	.....	.....
b.—Revenue from Shared and Private forests ...	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....	251 7 0
VI.—Livestock, stores, tools and plant :—				
a. Purchase of Cattle ...	.....	.....	.....	.....
b. Feed and keep of Cattle ...	.....	.....	.....	316 8 11
c.—Stores, tools and plant ...	.....	.....	.....	384 12 9

53.—[*Prescribed*]—Contd.

Raipur District.	Sambalpur District,	Saugar Division.	Seoni Division.	Wardha District.	Total.
Rs. a. p.	Rs. a, p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	345 6 7	92 1 4	1,055 15 8	57,777 4 7
.....	.....	.....	35 4 9	309 7 9	936 2 8
.....	.....	.....	1,861 6 7	17 15 3	4,395 15 3
.....	.....	0 6 0	.....	.....	0 6 0
.....	.....	.....	59 13 0	3,473 10 2	11,953 15 6
11,895 2 3	11,649 12 5	531 1 0	9,584 10 0	.....	95,546 8 10
6,190 7 8	.....	6,049 8 9	5,932 10 3	1,429 2 0	1,12,746 4 7
3,858 6 2	.....	7,086 1 5	3,949 2 1	2,111 15 11	79,785 10 6
782 8 2	.....	4,052 10 11	13,399 5 3	9 0 9	80,264 15 9
17,396 2 11	.....	39,671 14 5	34,456 0 5	15,614 13 1	4,08,182 9 2
13,040 12 7	.....	11,210 2 5	4,148 15 10	411 10 9	92,539 6 8
.....	.....	55 15 9	63 13 9	416 1 0	4,536 3 8
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	9,727 15 7
.....	2,807 11 4	.....	.....	111 3 6	4,493 12 11
.....	.....	.....	1 0 0	23 13 8	269 15 10
1,385 0 0	.....	587 3 9	254 8 8	344 15 6	14,489 9 11
54,548 7 9	14,457 7 9	69,590 7 0	73,838 11 11	25,329 12 7	9,77,646 13 5
.....	.....	10 8 0	.....	21 8 0	34,012 10 8
.....	.....	.....	.....	14 0 0	149 2 4
.....	.....	.....	430 5 0	.....	1,014 6 9
.....	.....	.....	.....	.....	.....
.....	.....	.....	51 9 0	1,162 5 7	3,452 10 9
8,371 3 3	4,552 12 1	14,529 11 1	10,329 10 2	5,433 4 11	1,57,413 3 0
.....	.....	.....	.....	.....	177 3 1
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	251 7 0
.....	.....	.....	.....	.....	463 6 8
533 4 4	.....	106 14 3	381 3 1	461 14 3	6,543 15 3
.....	.....	30 0 0	43 10 0	88 11 9	1,088 11 4

BUDGET HEADS. A.—Conservency and Works.	Direction.	Balaghat District.	Betul Division.	Bhandara District.
BUDGET HEADS.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works				
VII.—Communications and Buildings :—				
a. Roads and Bridges ..	.....	.....	250 13 0	.....
b. Buildings ...	.....	.....	.....	.....
c. Other Works ...	.....	.....	.....	.....
VIII—Demarcation, improvement and extension of forests :—				
a. Demarcation ...	.....	5 0 0	.....	.....
b. Compensation for Land and Rights.	.....	650 0 0	.....	.....
c. Surveys and Working Plans ...	.....	.....	.....	.....
d. Plantations ...	.....	11 0 0	94 13 8	.....
e. Protection from ûre ...	118 0 8	73 14 7	910 6 2	.....
f. Other Works ...	77 8 7	142 0 0	51 4 7	.....
IX.—Miscellaneous :—				
a. Refunds ...	.....	.....	49 13 0	3 6 0
b. Law charges ..	.....	.....	.....	.....
c. Other charges ...	2,711 2 8	.....	1 5 0	.....
Total A.—Conservancy and Works ..	3,365 4 3	8,365 9 8	9,368 7 2	7,088 5 0
BUDGET HEADS.				
B.—Establishments.				
I.—Salaries :—				
a. Conservators ..	17,393 5 4	.....	.....	.....
b. Superior Officers ...	6,604 0 2	450 0 0	5,400 0 0	.....
c. Subordinate Forest and Depot Establishments ...	1,802 10 3	792 0 0	2,284 1 1	.....
d. Office Establishments ...	4,304 3 2	.....	644 0 0	.....
e. Deputation and Special Allowances...	600 0 0	.....	.....	.....
II.—Travelling Allowances :—				
a. Conservators ...	1,602 10 0	55 4 0	.....	.....
b. Superior Officers ..	901 12 0	.....	995 8 0	.....
c. Subordinate Forest and Depot Establishments ...	90 8 0	.....	.....	.....
d. Office Establishments ...	338 0 11	.....	76 1 8	.....
III.—Contingencies—				
a. Stationery ...	9 5 9	.....	12 6 0	.....
b. Carriage of tents and records ...	661 0 2	.....	545 13 7	4 0 0
c. Rents, Rates and Taxes ...	540 0 0	.....	300 0 0	.....
d. Pay of Police Guards ..	.....	.....	.....	.....
e. Official Postage ...	288 5 6	95 4 0	169 12 0	116 14 0
f. Sundries ...	842 14 7	.....	167 12 6	.....
Total, B. Establishments ...	35,978 11 10	1,392 8 0	10,595 6 10	120 14 0
Grand Total of Expenditure ...	39,344 0 1	9,758 1 8	19,963 14 0	7,209 3 0

53.—[*Prescribed*]—Contd.

Bilaspur District.	Chanda Division.	Chhindwara Division.	Damoh Division.	Hoshangabad Division.	Jubbulpore District.	Mandla Division.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	118 14 5	.....	190 8 5
.....	259 6 9	44 4 0	4 8 0	213 2 0	.....	562 10 4
.....	2 0 0	.....	.....	3 3 1	.....	822 9 10
.....	32 13 0	220 13 3	.....	385 7 6	.....	184 3 2
.....	.....	.....	.....	.....	.....	.....
.....	436 14 5	55 8 0	153 14 9	.....	47 11 10	673 8 1
.....	.....	.....	.....	.....	.....	.....
.....	3,924 8 2	.....	.....	1,270 7 0	.....	2,073 7 5
.....	621 2 3	.....	124 5 9	30 3 0	.....	703 0 11
.....	1 0 0	.....	.....	15 12 0	.....	.....
.....	.....	.....	.....	.....	.....	0 12 0
.....	200 2 6	.....	10 0 0	22 3 3	.....	96 11 6
2,758 10 10	46,270 10 1	8,174 2 2	12,991 15 10	16,204 1 0	4,404 3 9	17,590 6 9
.....	.....	.....	.....	.....	.....	.....
.....	7,284 8 3	.....	.....	10,362 7 0	.....	8,993 5 4
.....	5,351 3 0	.....	672 0 0	3,669 8 10	672 0 0	7,547 6 9
.....	1,342 12 2	.....	.....	624 0 0	.....	979 2 4
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	2,225 6 0	.....	.....	786 6 6	.....	1,041 0 0
.....	.....	.....	.....	52 15 11	.....	547 12 11
.....	31 3 6	.....	.....	15 6 0	.....	104 2 10
.....	1 0 0	.....	.....	12 10 9	.....	94 2 9
.....	291 3 3	.....	.....	272 6 6	.....	575 7 1
.....	39 0 0	.....	.....	.....	.....	300 0 0
.....	.....	.....	.....	.....	.....	.....
.....	456 6 6	57 10 6	13 9 3	294 15 0	11 15 0	145 11 6
.....	224 8 4	.....	.....	221 3 4	.....	370 8 4
.....	17,247 3 0	57 10 6	685 9 3	16,311 15 4	683 15 0	20,698 11 10
2,758 10 10	60,517 13 1	8,231 12 8	13,677 9 1	32,516 0 4	5,088 2 9	38,289 2 7

BUDGET HEADS. A.—Conservancy and Works.	Mandla District.	Nagpur Division.	Narsinghpur District.	Nimar Division.
BUDGET HEADS.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.				
VII.—Communications and buildings:—				
a. Roads and Brides ...	.....	.....	.....	.....
b. Buildings ...	.....	16 0 0	.....	226 1 2
c. Other Works ...	.....	.....	.....	9 0 0
VIII.—Demarcation, improvement and extension of forests:—				
a. Demarcation ..	.....	.....	.....	738 15 3
b. Compensation for Land and Rights.	.....	.....	.....	.....
c. Surveys and Working-Plans ...	41 1 8	.....	431 7 2	7 10 6
d. Plantations ...	.....	.....	.....	237 15 4
e. Protection from Fire ...	.....	.....	.....	2,639 10 6
f. Other Works ...	.....	.....	.....	1,344 6 10
IX.—Miscellaneous:—				
a. Refunds ...	126 12 9	328 15 0	.....	.....
b. Law Charges ...	.....	.....	.....	14 6 4
c. Other Charges ...	.....	4 0 0	.....	89 10 3
Total, A.—Conservancy and Works ..	15,018 12 9	8,199 8 10	3,628 0 4	19,498 8 9
BUDGET HEADS.				
B.—Establishments.				
I.—Salaries—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers ...	.....	5,993 5 4	.....	13,390 0 0
c. Subordinate Forest and Depot Establishments ...	684 0 0	.....	84 0 9	4,648 14 0
d. Office Establishments ..	.....	219 6 1	.....	954 9 10
e. Deputation and Special Allowances...	.....	.....	.....	.....
II.—Travelling Allowances—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers ...	.....	765 8 0	.....	3,084 4 8
c. Subordinate Forest and Depot Establishments ...	16 9 8	.....	.....	22 14 0
d. Office Establishments ...	.....	26 5 5	.....	84 3 8
III.—Contingencies—				
a. Stationery ...	.....	.....	.....	51 5 3
b. Carriage of tents and records ...	.....	188 5 11	.....	715 6 7
c. Rents, Rates and Taxes ...	.....	.....	.....	.....
d. Pay of Police Guards ...	.....	.....	.....	.....
e. Official Postage ...	61 12 6	136 9 0	.....	254 13 6
f. Sundries ...	.....	90 13 10	.....	262 13 7
Total, B. Establishments ...	762 6 2	7,420 5 7	84 0 0	23,469 5 1
Grand Total of Expenditure ...	15,781 2 11	15,619 14 5	3,712 0 4	42,967 13 10

Dated Calcutta:
The 31st May 1888.

53.—[*Prescribed*]—Contd.

Raipur District.	Sambalpur District.	Saugor Division.	Seoni Division.	Wardha District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	3 0 0	563 3 8
.....	.....	230 8 10	20 7 0	11 2 0	1,588 2 1
.....	.....	.....	.....	11 12 6	848 9 5
.....	572 0 0	38 0 1	37 12 0	211 15 8	2,426 15 11
.....	.....	.....	.....	.....	650 0 0
.....	.....	.....	.....	.....	1,847 12 5
.....	.....	.....	2 9 8	285 5 8	631 12 4
.....	.....	463 8 0	1,922 4 4	419 11 10	13,815 14 8
.....	.....	1,024 0 9	153 4 0	.....	4,271 4 8
87 0 0	.....	16 0 0	65 14 9	112 3 0	806 12 6
.....	.....	.....	.....	.....	15 2 4
.....	.....	9 13 0	9 4 0	358 9 9	3,512 13 11
8,991 7 7	5,124 12 1	16,459 0 0	13,447 13 0	8,595 8 11	2,35,545 4 9
.....	.....	.....	.....	.....	17,393 5 4
9,586 10 8	.....	4,520 15 6	9,443 5 4	1,508 5 4	83,536 14 11
672 0 0	.....	1,733 1 4	4,878 0 3	1,532 9 9	37,023 7 3
66 8 0	.....	324 0 0	684 0 0	.....	10,142 9 7
0 6 6	.....	.....	.....	.....	600 6 6
.....	.....	.....	.....	.....	1,602 10 0
1,665 7 0	.....	1,125 2 0	485 0 0	205 8 0	13,336 1 8
.....	.....	.....	.....	15 5 0	746 1 6
.....	.....	22 2 8	46 2 3	.....	743 12 11
.....	.....	.....	15 2 8	0 11 0	196 11 9
154 8 7	.....	336 1 9	363 9 4	2 5 6	4,110 4 3
0 14 6	.....	260 0 0	300 0 0	.....	1,739 14 6
.....	.....	.....	.....	.....	.....
33 12 0	30 0 0	372 14 0	122 9 0	16 13 6	2,679 10 9
207 11 1	.....	182 1 0	193 3 6	86 15 0	2,850 9 1
12,387 14 4	30 0 0	8,876 6 3	16,530 15 11	3,368 9 1	1,76,702 8 0
21,379 5 11	5,154 12 1	25,335 6 3	29,978 12 11	11,964 2 0	4,12,247 12 9

(Signed) G. J. VANSOMEREN, Major,

Asst. Comptroller General (Forests.)

Annual Form No. 54—[*Prescribed.*]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account Current for the year 1882-83

Dr.

	Rs.	a.	p.	Rs.	a.	p.
To Cash Balance	.....			1,635	7	3
„ Revenue as per Annual Summary (Form No. 53)	.....			9,77,646	13	5
„ Service Funds—						
Military Fund, Bengal	243	0	0			
Do. Madras	438	15	0			
Military Orphan Fund, Bengal ...	210	0	0			
Uncovenanted Service Family Pension Fund Bengal	2,439	5	0			
General Family Pension Fund ...	525	0	0			
				3,856	4	0
To Deposits				70	13	0
„ Forest Cash Remittances (Local)—						
Remittances from State treasurses ...	3,97,533	9	10			
Inter-Divisional Transfers ...	10,454	13	10			
				4,07,988	7	8
„ Advances Recoverable	.....			1,81,273	1	3
„ Suspense	.....			191	14	0
„ Account Current (other Governments)—						
Remittances form Government of India ...	56	8	2			
Do. From Government of Bombay ...	500	0	0			
Do. From Government N. W. P. and Oudh	3,686	3	0			
Do. From Bengal	600	0	0			
				4,842	11	2
„ Inter-Departmental Transfers—						
Public Works Department State Railways						
Nagpur and Chhattisgarh State Railway	556	3	0			
Military Department, Madras ...	123	15	2			
Civil Department						
Jails	1,548	7	7			
Mathematical Instrument Department ...	175	5	9			
Education	6	4	9			
Mint	65	2	0	2,475	6	3
Total ...				15,79,980	14	0

Cr.

	Rs.	a.	p.	Rs.	a.	p
By Expenditure as per Annual Summary (Form No. 53)	.....			4,12,247	12	9
„ Deposits	.....			34	3	6
Forest Cash Remittances (Local)—						
Remittances to State treasuries ...	9,26,196	0	4			
Inter-Divisional Transfers ..	10,629	13	1			
				9,36,825	13	5
Advances Recoverable ...	.....			1,82,650	2	7
Suspense	.....			191	14	1
Account Current other Governments—						
Remittances to Government of Assam ...	961	0	0			
Do. to Government N. W. P. and Oudh ...	125	0	0			
Do. to Government of Madras ...	12,426	2	3			
				13,512	2	3
Inter-Departmentat Transfers—						
Public Works Department State Railways ...	.....					
Do. Wardha Coal State Railways ...	2,548	3	11			
Do. Nagpur and Chhattisgarh State Railway	6,348	13	2			
Do. Rajputana and Malwa State Railway ...	448	0	0			
Do. Other Branches	3,974	7	8			
Military Department, Bengal ...	12	0	0			
Do. Bombay ...	16,650	0	0			
Civil Departments—						
Jails	167	3	0			
Police	308	6	8			
Education	2	9	3			
Rewards for passing examination ...	180	0	0			
Civil Departments—						
Post Office	126	0	0			
Miscellaneous	8	1	11	30,773	13	7
Cash Balance	.....			3,745	0	4
Total ..				15,79,980	14	0

Calcutta:
The 31st May 1883

G. J. VANSOMEREN,
Asst. Comptroller General (Forests.)

Annual Form No. 55.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Outstandings and Liabilities on account of Contractors and Disbursers for 1882-83.

Divisions.	Department Debtor			Department Creditor			Balance Due		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction ...	...	11,104 13 8	11,104 13 8	305 14 2	11,050 0 0	11,355 14 2	251 0 6	...	
Balaghat District ...	...	73 8 0	73 8 0	50 0 0	48 8 0	98 8 0	25 0 0	...	
Betul Division ...	...	10,037 9 6	10,037 9 6	26 13 11	10,495 10 3	10,522 8 2	484 14 8	...	
Chanda Division ..	...	58,534 10 8	58,534 10 8	24,007 10 7	57,089 12 9	81,097 7 4	22,562 12 8	...	
Chhindwara District ...	...	8,231 12 8	8,231 12 8	.....	8,233 14 9	8,233 14 9	2 2 1	...	
Hoshangabad Division ...	...	15,841 15 10	15,841 15 10	106 14 11	16,845 10 11	16,952 9 10	1,110 10 0	...	
Jubbulpore District ...	...	4,224 15 7	4,224 15 7	1 14 11	4,226 7 0	4,228 5 11	3 6 4	...	
Mandla Division ...	...	18,140 14 0	18,140 14 0	580 6 10	18,432 13 8	19,013 4 6	872 6 6	...	
Nagpur Division ...	20	6,710 6 6	6,730 6 6	80 13 4	6,805 8 4	6,886 5 8	155 15 2	...	
Nimar Division ...	...	23,830 0 1	23,830 0 1	561 1 3	24,260 0 10	24,821 2 1	991 2 0	...	
Raipur District ...	...	717 5 3	717 5 3	28 9 6	796 14 8	825 8 2	108 2 11	...	
Saugor Division ...	...	3,164 8 10	3,164 8 10	68 14 7	3,368 1 8	3,437 0 3	272 7 5	...	
Seoni Division ...	...	17,930 7 4	17,930 7 4	351 9 5	18,185 4 0	18,536 13 5	606 6 1	...	
Wardha District ...	...	2,730 1 4	2,730 1 4	428 1 0	2,811 7 9	3,239 8 9	509 7 5	...	
Total ..	20	1,81,273 1 3	1,81,293 1 3	26,598 12 5	1,82,650 2 7	2,09,248 15 0	27955 13 9	...	

CALCUTTA:

The 31st May 1883 .

G. J. VANSOMEREN,

Asst. Comptroller General (Forests).

Annual Form No. 58.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Trees felled by Government Agency during the year 1882-83.

Divisions.	Trees felled.		Remarks.
	Description.	Number.	
Mandla ...	Sal trees ...	330	
Chanda ...	Teak trees ...	499	
	Shishum trees ...	1	
	Boeja sal trees ...	6	
	Kurrum trees ...	14	
	Rewnja trees ...	1	
	Saj trees ...	9	
	Moyen trees ...	12	
	Lendea trees ...	83	
	Dhowra trees ...	1,150	
	Satin wood trees ...	48	
	Garrari trees ...	1,300	
	Unreserved trees ...	7,000	
Saugor ...	Teak trees ...	386	
Wardha ..	Teak trees ...	670	
	Total ...	11,509	

FORM No. 59.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Out-turn of Timber and other produce cut and collected by Government agency during the year 1882-83.

Divisions.	How obtained.	Produce cut and collected. Description.	Number or quantity.	Cubic feet.	Remarks.
Direction.	By collection ...	Firewood ...	403	Maunds.	
		Total ...	403	...	
Mandla Division.	Section felling ...	Sal logs ..	113	4,003	
	Fallen wood ...	Teak logs ..	25	310	
	Green and dry trees..	Sal scantlings ...	1,244	3,474	
	Ditto ...	Sal sleepers 10'×10"×15" ..	50	174	
	Ditto ...	" 10'×10"×5" ...	2,953	10,147	
	Ditto ...	" 6'×8'×5" ..	22	45	
	Ditto ..	" " ..	10	28	
	Coppicing ...	Teak poles &c. ...	172	...	
	Recovered from river	Teak pieces ...	2	...	
	Coppicing ...	Teak bullies ..	1,231	...	
	Fallen wood ...	Sal bullies ...	209	...	
	Recovered from river	Sal pieces ..	25	21	
	Cutting ...	Bullees ..	331	...	
	Recovered from river	Satkutta pieces ...	182	...	
	Ditto ...	Saj bullees ...	4	...	
	Ditto ...	Kurria ..	22	...	
	Fallen wood ...	Sal furdas ...	96	...	
	Recovered from river	Boats ..	10	...	
		Total timber ..	6,701	18,202	
	Collecting ...	Firewood ...	750	Maunds.	
	Burnt ...	Charcoal ..	286	Maunds.	
	Cutting ...	Bamboos ...	106,209	...	
	Recovered from river	Waif and stray wood ...	1,240	...	
	Collecting ...	Hurra ..	2,040	Maunds.	
	Ditto ..	Teekur ...	67	Maunds.	
	Ditto ...	Baichandi ...	2	Maunds.	
	Ditto ...	Stag horns ..	2	Maunds.	
	Ditto ...	Mohwa ..	148	Maunds	
	Ditto ...	Lac ..	18	Maunds.	
	Ditto ...	Hide ...	8	...	
	Ditto ...	Grass ...	778,400	Poolas.	
		Total ..	889,170	...	
Hoshangabad ...	Copsing ..	Teak stumps ..	3,68[illegible]	...	
	Ditto ...	Teak Chulias ...	564	...	
	Ditto ...	Teak sakties ..	2,443	...	
	Ditto ...	Teak Khakers ...	242	...	
		Total timbers ...	6,931	...	
	Collecting ...	Firewood ...	79	Cartloads	
	Ditto ...	Mohwa ..	9	Maunds.	
	Ditto ...	Hides ...	34	...	
	Ditto ...	Hurra ..	7	Maunds.	
		Total ...	129	...	
Nimar ...	Collecting ...	Teak spokes ...	71	...	
	Ditto ...	Khair Kalias ..	10	...	
		Teak pieces ...	1	Cartload.	
	...	Total timber ..	82	...	

FORM No 59 —*Continued.*

Divisions.	How obtained.	Produce cut and collected.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
	From Kirgaum ..	Chironji ...	156	Pais.	
	Nursery ...	Tilli ...	14	Maunds.	
	Ditto ...	Grain ...	9	Maunds.	
	Ditto ...	Pumpkins ..	4	...	
	Ditto ..	Oranges ...	280	..	
	Ditto ..	Grass ...	28	Hd. loads.	
	Ditto ...	Cauliflowers ..	502	Plants.	
	Ditto ...	Plantains ..	51	...	
	Ditto ...	Jawari ...	25	Maunds.	
	Ditto ...	Jawari stalks ...	2,495	Bundles.	
	Ditto ...	Dallees ..	37	...	
		Total ..	3,601	...	
Chanda ..	From Govt. forests ..	Teak logs ...	88	1,894	
	From logs at Local Depot ...	Saj logs ..	506	...	
	Ditto ...	Ditto ...	8	132	
	From Govt. forests ..	Dhora prop logs ..	1,209	4,056	
	Ditto ...	Kurrum logs ..	13	120	
	Ditto ..	Rewuja logs ..	1	30	
	From Mohurli forests.	Dhowra logs ...	6	39	
	from Govt. forests ..	Moyen logs ..	10	137	
	Ditto ...	Tendoo logs ...	2	20	
	Ditto ..	Sheeshum ...	1	5	
	Excess found ..	Teak logs squared ..	6	54	
	From Mohurli forests	Yen and Beeja sal myals ..	4	18	
	Outturn from mills ..	Teak sleepers 6'×8"×5" ..	4,031	6,713	
	Ditto ...	Saj sleepers 6'×8"×5" ..	6,509	10,851	
	Ditto ...	Teak scantlings ...	1,293	926	
	Ditto ...	Jungle wood scantlings ...	29	...	
	Ditto ...	Ditto slabs ..	6	...	
	Ditto ..	Teak planks ...	8,141	3,478	
	Ditto ...	Saj planks ..	102	203	
	From Mohurli forest.	Teak moondas ...	1	1	
	Ditto ...	Ditto ...	2	...	
	From both Government and Zamindari forest ..	Specimen of timber pieces ..	185	...	
	Out turn from mills..	Saj broads gauge sleepers ...	3,704	12,923	
	From Govt. forest ...	Dhooras ...	81	...	
	Ditto ...	Ascooda ...	5,341	...	
	Old wheels and arras.	Wheel pairs ..	13	...	
	brought ono tock. ...	Arras ...	10	...	
	From Govt. forest ..	Fellies Teak ...	80	...	
	Ditto ...	Spokes ...	480	...	
	Ditto ...	Naves ...	20	...	
	From Mohurli forest.	Behra wood laths ...	50	...	
	From Mohurli forest.	Teak poles ...	400	...	
	Ditto ...	Khakers ...	1,618	...	
		Total Timber ...	33,950	41,610	
	From Mohurli forest.	Male Bambus ...	106	..	
	Ditto ...	Bambus ...	10,280	...	
	Ditto ..	Grass poolas ...	27,600	...	
	Ditto ...	Do. stack ...	1	...	

FORM No. 59:—*Continued.*

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
	From Mohurli forest..	Lac ...	9	Maunds.	
	Ditto ...	Hurra ..	132	Maunds.	
	Ditto ..	Horns ...	8	Maunds.	
	Ditto ...	Plantains ..	505	...	
	Ditto ...	Goor ...	6	Maunds.	
	Ditto ..	Pine apples ...	6	...	
	Ditto ..	Tur ...	5	Maunds.	
	Ditto ...	Castor seeds ..	1	Maund.	
	Ditto ..	Tur and husks &c. ...	9	Basket loads.	
		Total ...	38,668	...	
Seoni ...	Thinning ...	Teak pieces ...	15	...	
	Ditto ...	Bija peices ...	28	...	
	Ditto ...	Tinsa pieces ...	2	...	
	Ditto ...	Saj pieces ...	44	...	
	Ditto ...	Khamer poles ...	1	...	
	Ditto ..	Refused teak pieces ...	6	Ct. loads.	
		Total timber ...	96	...	
	From fallen wood ...	Fuel ...	140	Ct. loads.	
	Ditto ...	Ditto ...	11	Hd. loads	
	From cutting ...	Bambus ...	79,505	...	
	Ditto ...	Ditto ...	41	Ct. loads.	
		Grass poolas ...	97,006	...	
		Total ...	176,697	...	
	Ditto ...				
Suagor ..	From copsing ..	Teak poles ...	611	...	
	Ditto ..	Unclassed wood ...	4	...	
	Ditto ...	Sandal wood pieces ...	4	...	
		Total ...	619	...	
Wardha ...	By cutting ...	Teak poles ..	2,461	...	
	Ditto ...	Miscellaneous poles ...	475	...	
	Ditto ...	Teak stumps ...	131	...	
	Ditto ...	Mohwa trees ...	5	...	
	Ditto ...	Teak bits ...	2	...	
	Ditto ...	Teak scantlings ..	4	...	
	Ditto ...	Dhoora ...	1	...	
	Ditto ..	Askoods ...	2	...	
		Total timber ...	3,081	...	
	By cutting ...	Fuel ..	1,274	Maunds.	
	Ditto ...	Ditto ...	6	Bundles.	
	Ditto ...	Berkanas ...	16,561	...	
	By collection ...	Gum ...	17	Maunds.	
	Ditto ...	Bhibas ..	1	Maund.	
	Ditto ...	Lac ...	1	Maund.	
	Ditto ...	Char ...	11	Maunds.	
	Ditto ...	Tur ...	3	Maunds.	
	Ditto ...	Koasa ...	92	...	
	Ditto ...	Mohwa ...	81	Maunds.	
	Ditto ...	Mangoes ..	1,988	...	
	Ditto ...	Skin ...	2	...	
	Ditto ...	Charcoal ...	3	Maunds.	
	Ditto ...	Cotton ...	1	Maunds.	
		Total ..	20,041	...	
		Grand Total ...	11,80,169	59,812	

FORM No. 59.—*Continued.*

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet.	
		Abstract.			
		Teak logs round ...	113	2,204	
		Sal logs round ...	113	4,003	
		Teak logs squared ...	6	54	
		Logs other than teak and sal ...	1,760	4,567	
		Teak scantings ...	1,297	926	
		Sal scantlings ...	1,244	3,474	
		Scantlings other than teak and sal.	29	...	
		Teak sleepers ...	4,031	6,713	
		Sal sleepers ...	8,035	10,394	
		Sleepers other than teak and sal...	10,213	23,774	
		Sal slabs ...	96	...	
		Slabs other than teak and sal ...	6	...	
		Teak planks ...	8,141	3,478	
		Planks other than teak and sal ...	102	203	
		Teak pieces ...	7,021	...	
		Do. cartloads ...	7	...	
		Sal pieces ...	25	21	
		Pieces marketable other than teak and sal ...	5,907	...	
		Teak poles ..	5,420	1	
		Sal poles ..	209	...	
		Poles other than teak and sal ...	2,675	...	
		Boats ...	10	...	
		Total timbe ...	51,460	59,812	
		Firewood ...	2,427	Maunds.	
		Ditto ...	219	Ct. loads.	
		Ditto ...	11	Hd. loads.	
		Ditto ...	6	Bundles.	
		Charcoal ..	289	Maunds.	
		Bambus ...	196,100	...	
		Ditto ...	41	Ct. loads.	
		Grass ...	9,03,000	Poolas.	
		Ditto ...	28	Hd. loads	
		Ditto ...	1	Stack.	
		Jawari stalks ...	2,495	Bundles.	
		Berkanas ...	165,61	...	
		Waif and stray wood ...	12,40	...	
		Hurra ...	21,79	Maunds.	
		Teakur ...	67	Maunds.	
		Baichandi ...	2	Maunds.	
		Stag horns ...	10	Maunds.	
		Castor seeds ...	1	Maund.	
		Mohwa ...	238	Maunds.	
		Lac ...	28	Maunds.	
		Hides ...	42	...	
		Gum ...	17	Maunds.	
		Bhibas ...	1	Maunds.	
		Kossa ..	92	...	
		Skins ...	2	...	
		Cotton ...	1	Maund.	
		Grain ...	50	Maund.	
		Fruits ..	156	Pais.	
		Ditto ...	2,834	...	
		Ditto ...	11	...	
		Miscellaneous produce ...	554	...	
		Total ...	11,28,709	...	
		Grand Total ...	11.80,169	59,812	

FORM No. 60.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Timber and other produce received from Forests in sale depots during the year 1882-83.

Divisions.	Depots.	Produce received.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Mandla ...	Gwarighat ...	Teak logs ...	20	220	
		Sal logs ...	19	736	
		Sal logs squared ..	22	175	
		Sal sleepers 6'×8'×5" ..	484	793	
		do. 10'×10×10" ...	19	159	
		do. 10'×10'×5" ..	3,882	13,471	
		Sal sanctlings ...	160	294	
		Sal Furdas ...	3	...	
		Teak Bullees ...	46	...	
		Teak pieces ...	2	...	
		Sal pieces ...	25	...	
		Saj Bullees ...	4	...	
		Satcutta pieces ..	182	...	
		Kurrees ...	22	...	
		Bullees ..	308	...	
		Waif wood ...	148	...	
		Waif and stray wood ..	40	...	
		Boats ..	9	...	
		Bamboos ...	11,400	...	
Chanda ...	Warora ...	Teak logs ...	35	801	
		Teak planks ..	1,014	462	
		Dhowra prop logs ..	1,209	4,056	
		Yen and Beejasal myals ...	4	17	
		Teak Moondas ..	1	...	
		Saj planks ...	359	12	
		Fellies ...	80	...	
		Dhooras ...	81	...	
		Ascoods ...	5,023	...	
		Spokes ...	480	...	
		Khakers ...	50	...	
		Naves ...	20	...	
		Male Bambus ...	106	...	
		Bambus ...	10,280	...	
		Grass poolas ..	2,000	...	
		Do. stack ...	1	...	
		Tur, maunds ...	5	...	
		Castor seeds, maunds ...	1	...	
Wardha ...	Wardha ...	Teak poles ...	618	...	
		Teak stumps ...	131	...	
		Fuel, maunds ...	1,068	...	
		Grass poolas ...	1,30,152	..	
		Lac, maunds ...	1	...	
		Mohwa, maunds ...	32	...	
		Gum, maunds ...	7	...	
		Bhibas, maunds ..	2	...	
		Char, maunds ...	5	...	
		Tur, maunds ...	1	...	
		Cotton, maunds ...	1	...	

FORM No. 60.—contd.

Division.	Depots.	Produce received.			Remarks.
		Description.	Number or quantity.	Cubic feet	
Wardha ...	Arvi ...	Teak poles ...	1,522	...	
		Teak scantlings ..	4	...	
		Dhooras ...	1	...	
		Ascoods ...	2	...	
		Berkauas ..	16,561	...	
		Beam or scantlings ...	3	...	
		Miscellaneous poles ..	102	...	
		Teak bits ...	2	...	
		Fuel, maunds ...	15	...	
		Do. bundles ...	6	...	
		Charcoal, maunds ...	3	...	
		Bambus ...	70	...	
		Grass poolas ..	91,501	...	
		Skin ..	2	...	
		Gum, maunds ..	10	...	
		Char, maunds ..	6	..	
		Kosa ..	92	...	
		Mohwa maunds ...	49	...	
		Teak leaves, bundles ..	82	...	
		Total ...	2,79,595	21,196	
		ABSTRACT.			
		Teak logs round ..	55	1,021	
		Sal logs round ...	19	736	
		Sal logs squared ..	22	175	
		Logs other than Teak and Sal ..	1,213	4,073	
		Teak scantlings ..	4	...	
		Sal scantlings ...	160	294	
		Scantlings other than Teak & Sal ...	1	...	
		Sal sleepers ...	4,385	14,423	
		Teak pieces marketable ...	4	...	
		Sal pieces marketable ...	28	...	
		Pieces markatable other than Teak and Sal ...	5,499	...	
		Teak poles .	2,318	...	
		Poles other than Teak and, Sal ...	17,605	...	
		Teak planks ...	1,014	462	
		Planks other than Teak and Sal ...	359	12	
		Total Timber ...	32,686	21,196	
		Fuel, maunds ...	1,083	...	
		Do. bundles ...	6	...	
		Charcoal, maunds ..	3	...	
		Skins ...	2	...	
		Kossa ..	92	...	
		Boats ..	9	...	
		Castor seeds, maunds ...	1	...	
		Gum, maunds ...	17	...	
		Bhibas do. ...	2	...	
		Lac do. ...	1	...	
		Mohwa do. ...	81	...	
		Cotton do. ..	1	...	
		Teak leaves, bundles ...	82	...	
		Grain, maunds ...	8	...	
		Fruits, maunds ..	11	...	
		Bamboos ...	21,856	...	
		Grass poolas ...	223,654	...	
		Total ...	246,909	..	
		Grand total ...	279,595	21,196	

FORM No. 61.

FOREST DEPARTMENT, CENTRAE PROVINCES.

Sale of timber and other produce cut and collected by Government agency during the year 1882-83.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		SOLD FROM DEPOTS.			
Mandla ...	Gwarighat ...	Teak logs	21	258	
		Sal logs	19	738	
		Sal logs squared	16	138	
		Sal scantlings	9	8	
		Sal sleepers 10′ × 10″ × 5″ ...	3,881	13,468	
		Do. 6′ × 8″ × 5″ ...	3,241	5,369	
		Do. 6′ × 8″ × 4½″ ...	931	1,396	
		Do. 10′ × 10″ × 10″ ..	8	70	
		Khamare sleepers	31	46	
		Sal Furdas	4	...	
		Teak Bullees	45	...	
		Teak pieces	2	...	
		Sal pieces	25	..	
		Waif wood	148	...	
		Saj Bullees	4	...	
		Waif and stray wood	40	...	
		Satcutta pieces	181	..	
		Kurrees	22	...	
		Bullees	308	...	
		Boats	3	...	
		Bambus.	5,700	...	
Chanda ...	Warora ...	Teak logs round	30	944	
		Teak logs	35	802	
		Behra logs	2	...	
		Dhowra prop logs	1,373	4,263	
		Yen and Beejasal myals ...	11	59	
		Teak scantlings	2,481	2,892	
		Teak planks	616	410	
		Teak furdays	42	187	
		Teak khakers	10	...	
		Yen khakers	24	...	
		Saj planks	574	393	
		Dhooras	118	...	
		Askoods	6,161	...	
		Khakers	58	...	
		Tur, maunds	5	...	
		Naves	2	...	
		Fellies	79	...	
		Grass stacks	1	...	
		Castor seeds, maunds ...	1	...	
		Spokes	39	...	
		Bambus	12,307	...	
		Grass poolas	2,000	...	
	Rajamaudry ...	Teak logs round	1,976	25,662	
		Teak logs squard	136	1,980	
		Teak scantlings	8,077	9,573	
	Cocanada ...	Teak logs round ...	17	688	
		Teak logs squared	9	132	
		Teak scantlings	9	25	
Wardha ...	Wardha ...	Teak poles	445	...	
		Teak sleepers	131	...	
		Dhooras	3	...	
		Firewood, maunds	1,059	...	

FORM No. 61—Contd.

Division.	Depot or locality.	Produce sold. Description.	Number of quantity.	Cubic feet.	Remarks.
Wardha (Contd.)		Charcoal maunds	9	...	
		Gum do.	8	...	
		Bhibas do.	1	...	
		Lac do.	2	...	
		Honey do.	4	...	
		Char do.	5	...	
		Mohwa do.	28	...	
		Grass poolas	1,59,120	...	
		Cotton maunds	1	...	
	Arvi ...	Teak poles	1,276	...	
		Teak scantlings	52	...	
		Beam or scantlings	1	...	
		Miscellaneous poles	102	...	
		Teak fellies	13	...	
		Dhooras	68	...	
		Ascoods	627	...	
		Berkhanas	15,697	...	
		Firewood, maunds	12	...	
		Teak bits	1	...	
		Skins	2	...	
		Teak leaves, bundles	57	...	
		Mohwa, maunds	49	...	
		Char do.	6	...	
		Bhibas do.	1	...	
		Gum do.	10	...	
		Bambus	572	...	
		Grass poolas	1,06,121	...	
		Total sales from Depot ...	3,36,315	69,496	
		SOLD LOCALLY.			
Direction ...	Telinkheri garden ...	Firewood, maunds	207	...	
Mandla ...	Mandla ...	Sal logs	2	79	
		Sal bullees	16	...	
		Sal furdas	202	...	
		Sal scantlings	601	304	
		Sal sleepers 10'×10"×5" ...	9	31	
		Waif and stray wood... ...	24	...	
		Bambus	6,658	...	
		Teckur, maunds	62	...	
		Hurra do.	445	...	
	Bijragogarh ..	Sal bullees	100	...	
		Sal sleepers 6'×8"×5" ...	16	24	
		Bambus	2·4,893	...	
		Hurra, maunds	7	...	
		Mohwa flowers, maunds ...	150	...	
		Stag horns, maunds	1	...	
		Lac, maunds	8	...	
	Singarampore ...	Teak bullees	1,002	...	
		Firewood, maunds	750	...	
		Bambus	3,868	...	
		Hurra, maunds	1	...	
		Lac do.	10	...	
	Lower Gour ...	Teak poles &c.	172	...	
		Charcoal maunds	285	...	
		Bambus	1,026	...	
		Grass poolas	7,68,450	...	
		Sal furdas	89	...	
	Mocha ..	Sal sidings	3	...	

FORM No. 61—Contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Mandla (Contd.)	Banjar valley forest...	Hurra, maunds	374	...	
	Topla ..	Teekur do.	3	...	
	Halon Range ..	Hurra do.	907	...	
	Phen Range ..	Hurra do.	877	...	
	Barola ...	Firewood, maunds	10	...	
		Bambus	29,802	...	
Betul ..	Bowergarh ...	Teak logs	242	1,361	
		Mohwa maunds	32	...	
		Fuel, headloads	7	...	
	Khamapur ...	Teak logs	4	26	
Hoshangabad ...	Jawardha ...	Haldoo sleepers	102	144	
		Teak stumps	52	...	
		Fuel, maunds	6	...	
		Bambus	200	...	
	Magardha ...	Teak stumps	8,543	...	
		Fuel, maunds	21	...	
		Mohwa, do.	2	...	
		Cattle hides	34	...	
	Burwani ...	Teak stumps	494	...	
		Teak choolias	541	...	
		Teak sakties	2,051	...	
		Fuel, maunds	50	...	
		Mowa, maunds	8	...	
	Dhekna ...	Teak stumps	356	...	
		Teak logs	219	1,939	
		Teak sakties	358	...	
		Chulias	152	...	
	Different places in 1st class reserves.	Jungle wood sleepers... ...	63	...	
	Jarpha ...	Fuel, maunds	2	...	
	Sohagpur ...	Roeja sleepers	18	39	
	Hoshangabad ...	Ditto	61	63	
	2nd Class reserves forests ...	Teak poles, cartload	1	...	
		Poles other than teak and sal' ..	6	...	
		Pieces marketable other than teak and sal	135	..	
		Do. cartloads ...	14	...	
		Do. headloads ...	136	...	
		Fuel, cartloads	28	...	
		do. headloads	2	...	
		Charcoal, cartload	1	...	
		Bambu	1	...	
		Behra, headloads	2	...	
		Gulli, maunds	2	...	
		Gum, koodos	1	...	
		Logs other than Teak and sal ...	1	...	
		Grass, headloads	22	...	
Nimar...	Punassa ...	Teak poles	209	...	
		do. spokes	500	...	
		do. pats	11	...	
		Khair plough	1	...	
		Mayals	3	...	
		Teak choolias	20	...	
		Teak muslies	116	...	
		Dhowra axle	1	...	
		Teak fellies	7	..	
		Teak pieces	55	...	
		Fuel	...	2,220	
		Khair khalias	10	...	
		Indian corn stalk, cartloads ...	1	...	

FORM No. 61.—Contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Nimar ...	Golai ...	Teak choolias	2	...	
		Teak pieces	4	...	
		Charputs	12	...	
	Ralwa ...	Teak follies	122	...	
		Fuel	...	8,076	
	Palri ...	Salai planks	40	...	
	Mataghat ...	Fuel	...	25	
	Masaughat .	do. cartloads	18	...	
	Sukhwa ...	Anjan khalias	37	...	
	Kheri ..	Anjan sleepers	272	...	
	Aonlia ...	Fruits, pais	156	...	
	Kaleobhit ...	Confiscated wood, pieces ...	125	...	
	Khandwa ...	Teak logs	15	...	
		Anjan sleepers	79	...	
		Teak poles	90	...	
	Kirgaon ...	Grain, maunds	38	...	
		do. mani	1	...	
		Grass, headloads	28	...	
		Cauliflower plants	502	...	
		Kurbi, poolas	2,495	...	
		Fruits	335	...	
		Vegetable, maunds	11	...	
		Dalees bundles	17	...	
Chanda Division.	Alapally ...	Teak planks	26	20	
		Saj planks	42	38	
	Donarghat ...	Teak scantlings	15	...	
	Chanda ..	Teak scantlings	4	2	
		Grass poolas	25,000	...	
	Tiddi ...	Teak sleepers	651	1,085	
		Saj sleepers	1,211	2,017	
		Bambus	470	...	
	Mohurli .	Lac, maunds	2	...	
		Hurra do.	23	...	
		Fruits	511	...	
		Ascoods	318	...	
		Behra woods, lathe	50	...	
		Dhowra, logs	6	35	
		Pairs of wheels	13	...	
		Teak poles	100	...	
		Khakers	1,568	...	
		Horns, maunds	9	...	
		Goor do.	5	...	
Seoni Division...	Korai and Rukher ..	Teak poles	195	...	
		Saj poles	19	...	
		Teak pieces	15	...	
		Bija pieces	28	...	
		Saj pieces	21	...	
		Saj planks	4	...	
		Carts of teak pieces	6	...	
		Khamere poles	1	...	
		Tinsa poles	2	...	
		Fuel, cartloads	140	...	
		Fuel headloads	11	...	
		Bambus	79,466	...	
		Grass poolas	61,450	...	
		Dry bambuscart loads	41	...	
Saugor ...	Garhakota ...	Teak poles	934	...	
	Goarjhamur ...	Do.	773	...	
		Teak posts	10	...	
		Wood pieces	4	...	
	Chitoli ...	Teak poles	450	...	
		Saj poles	117	...	

FORM No. 61—Contd.

Division.	Depot or locality.	Produce sold. Description.	Number or quantity.	Cubic feet.	Remarks.
Sauger ...	Jalandher ...	Sandal wood pieces	4	...	
		Teak wood do.	81	256	
		Other wood pieces	1.338	...	
		Fuel cartloads	3	...	
		do. headloads	107	...	
Wardha ...	District forests ...	Teak poles	676	...	
		Mohwa, maunds	77	...	
	Panjra garden ...	Fraits	1,988	...	
		Garss doolas	425	...	
	Zadgoan ...	Mohwa trees	5	...	
		Teak wood pieces	806	...	
		Other wood	444	...	
		Fuel, cartloads	29	...	
		De. bundles	14	...	
		Do. maunds	12	...	
		Bambus	15	...	
		Grass poolas	13,433	..	
		Other minor produce, maunds ...	1	...	
		Do. bundles ...	57	...	
		Total local sales ...	10,53,559	17,788	
		Grand Total ...	13,89,874	87,284	
		ABSTRACT OF THE CIRCLE SOLD FROM DEPOT.			
	Logs round ..	Teak	2,079	28,349	
		Sal	19	738	
	Logs squared ...	Teak	145	2,112	
		Sal	16	138	
		Logs other than teak and sal ...	1,384	4,322	
	Scantlings ...	Teak	10,619	12,490	
		Sal	9	8	
		Scantlings other than teak and sal ...	1	...	
		Sal sleepers	8,061	20,303	
		Sleepers other than teak and sal ...	31	46	
		Teak slabs	42	187	
	Pieces marketable	Teak	3	...	
		Sal	29	...	
		Pieces marketable other than teak and sal	7,370	...	
		Teak poles	1,920	...	
		Poles other than teak and sal ...	16,313	...	
		Teak planks	616	410	
		Planks other than teak and sal ..	574	393	
		Total timber ...	49,231	69,496	
		Fuel maunds	1,070	...	
		Charcoal do.	9	...	
		Boats	3	...	
		Castor seeds, maunds... ...	1	...	
		Gum do.	18	...	
		Bhibas do.	2	...	
		Lac do.	3	...	
		Honey do.	4	...	
		Mohwa do.	77	...	
		Teak leaves bundles	57	...	
		Cotton, maunds	1	..	
		Skins	2	...	

FORM No. 61—Contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Saugor ...		Fruit, maunds	11	...	
		Grain do.	5	...	
		Bambus	18,579	...	
		Grass poolas	2,67,242	...	
		Total ...	2,87,084	...	
		Total sales from depots ...	3,36,315	69,496	
		SOLD LOCALLY.			
	Logs round ...	Teak	503	3,580	
		Sal	2	79	
		Logs other than teak and sal ...	7	39	
	Scantlings ...	Teak	19	2	
		Sal	601	304	
	Sleepers ...	Teak	651	1,085	
		Sal	25	55	
		Sleepers other than teak and sal ...	1,806	2,263	
		Sal slabs	291	...	
	Pieces marketable.	Teak	410	...	
		Sal	3	...	
		Pieces marketable other the teak and sal ...	2,951	...	
	Pieces marketable.	Head loads	136	...	
		Cart loads	14	...	
	Poles ...	Teak	18,193	...	
		Sal	116	...	
		Poles other than teak and sal ...	2,603	...	
		Teak planks	30	21	
		Planks other than teak and sal ...	98	39	
		Total timber ...	28,459	7,467	
		Fuel	...	10,321	
		Do. maunds	979	...	
		Do. cart loads	297	...	
		Do. head loads	141	...	
		Charcoal, maunds	285	...	
		Do. cart loads	1	...	
		Hurra maunds	2,785	...	
		Hides	42	...	
		Mohwa, maunds	42	...	
		Mohwa flowers, maunds ...	150	...	
		Honey and wax, maunds ...	9	...	
		Lac, maunds	40	...	
		Gum, keodoos	1	...	
		Gulli, maunds	2	...	
		Behra, headloads	2	...	

FORM No. 61—Concluded.

Division.	Depot of locality.	Produce sold.			Remarks.
		Description.	Number of quantity.	Cubic feet.	
Saugor ..		Indian corn stalk, cartloads ...	1	...	
		Cawliflower, plants	502	...	
		Dallees, bundles	17	...	
		Kurbee, bundles	2,495	...	
		Gur, maunds	5	...	
		Skin	1	...	
		Fruits	2,830	...	
		Teakur maunds	130	...	
		Fruits, pais	156	...	
		Vegetable, maunds	11	...	
		Grain do.	38	..	
		do. Mani	1	...	
		Bambus	146,399	...	
		do. cartloads	41	...	
		Grass, poolas	867,647	...	
		do. headloads	50	...	
		Total ...	10,25,100	10,321	
		Total local sales ...	10,53,559	17,789	
		Grand Total ...	13,89,874	87,284	

Annual Form No. 62.—(*Prescribed*).

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depots or sold locally during the year 1882-83.

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Teak logs round ..	1,994	26,383		
Teak logs squared ..	145	2,112		
Logs other than Teak and Sal ..	198	344		
Teak Slabs or Furdas ...	913	3,398		
Scantlings ... Teak ...	16,662	19,450		
Scantlings ... Sal ...	139	158		
Sal sleepers ...	3,690	5,975		
Sleepers other than Teak and Sal ..	31	46		
Teak planks ...	190	20		
Planks other than Teak and Sal ...	3,635	1,317		
Teak poles ...	264	...		
Poles other than Teak and Sal ..	4,271	...		
Sal pieces marketable ...	3	..		
Pieces marketable other than Teak and Sal ...	2,637	...		
Clearcoal maunds ...	19	...		
Kossa ...	35	...		
Boats ...	8	...		
Fuel maunds ...	192	...		
Lac do. ...	2	...		
Honey do. ...	5	...		
Gum do. ...	2	...		
Bhibas do. ...	2	...		
Grain do. ...	4	...		
Bambus ...	13,480	...		
Grass poolas ...	293,143	...		
			341,664	59,203

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchasers from Depot.				
Logs round ... Teak ...	2,079	28,349		
Logs round ... Sal ...	19	738		
Logs squared .. Teak ...	145	2,112		
Logs squared .. Sal ..	16	138		
Logs other than Teak and Sal ...	1,354	4,322		
Scantlings ... Teak ..	10,619	12,490		
Scantlings ... Sal ..	9	8		
Scantlings other than Teak and Sal ..	1	...		
Sal sleepers ...	8,061	20,303		
Sleepers other than Teak and Sal ...	31	46		
Teak slabs ...	42	187		
Pieces marketable. Teak ...	3	...		
Pieces marketable. Sal ...	29	...		
Pieces marketable other than Teak and Sal ...	7,370	...		
Teak poles ...	1,920	...		
Poles other than Teak and Sal ...	16,313	...		
Teak planks ...	616	410		
Planks other than Teak and Sal ...	574	393		
Fuel maunds ...	1,070	...		
Charcoal do. ...	9	...		
Boats ...	3	...		
Castor seeds maunds ...	1	...		
Gum do. ...	18	...		
Bhibas do. ...	2	...		
Lac do. ...	3	...		
Honey do. ...	4	...		

Received from Forests in Depots.				
Logs round ... Teak	55	1,021		
Logs round ... Sal	19	736		
Sal logs squared	22	175		
Logs other than Teak and Sal	1,213	4,073		
Scantlings ... Teak	4	...		
Scantlings ... Sal	160	294		
Scantlings other than Teak and Sal	1	...		
Sal sleepers	4,385	14,423		
Pieces marketable Teak	4	...		
Pieces marketable Sal	28	...		
Pieces marketable other than Teak and Sal	5,499	...		
Teak poles	2,318	...		
Poles other than Teak and Sal	17,605	...		
Teak planks	1,014	462		
Lauks other than Teak and Sal	359	12		
Fuel maunds	1,083	...		
Do. bundles	6	...		
Charcoal maunds	3	...		
Skins	2	...		
Kossa	92	...		
Boats	9	...		
Castor seeds maunds	1	...		
Gum maunds	17	...		
Bhibas do.	2	...		
Lac do.	1	...		
Mohwa do	81	...		
Cotton do.	1	...		
Teak leaves bundles	82	...		
Grain maunds	8	...		
Fruits do.	11	...		
Bambus	21,856	...		
Grass poolas	223,654	...		
			279,595	21,196
Mohwa do.	77	...		
Teak leaves bundles	57	...		
Cotton maunds	1	...		
Skin	2	...		
Fruits maunds	11	...		
Grain do.	5	...		
Bambus	18,579	...		
Grass poolas	267,242	...		
			336,315	69,496
Sold locally.				
Logs round ... Teak	503	3,580		
Logs round ... Sal	2	79		
Logs other than Teak and Sal	7	39		
Scantlings ... Teak	19	2		
Scantlings ... Sal	601	304		
Sleepers ... Teak	651	1,085		
Sleepers ... Sal	25	55		
Sleepers other than Teak and Sal	1,806	2,263		
Sal slabs	291	...		
Pieces marketable. Teak	410	..		
Pieces marketable. Sal	3	...		
Pieces marketable other than Teak and Sal	2,951	...		
Pieces marketable. Head loads	136	...		
Pieces marketable. Cart loads	14	...		
Poles ... Teak	18,193	...		
Poles ... Sal	116	...		
Poles other than Teak and Sal	2,602	...		
Teak planks	30	21		
Planks other than Teak and Sal	98	39		
Fuel c.ft.	...	10,321		
Do. maunds	979	...		
Do. cart loads	297	...		
Do. head loads	141	...		
Charcoal maunds	285	...		
Do. cart loads	1	...		
Hurra maunds	2,785	...		

Annual Form No. 62.—(*Continued.*)

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
RECEIVED FROM THE FORESTS AND SOLD LOCALLY.				
Logs round ... Teak ...	503	3,580		
Logs round ... Sal ...	2	79		
Logs other than Teak and Sal ...	7	39		
Scantlings ... Teak ...	19	2		
Scantlings ... Sal ...	601	304		
Sleepers ... Teak ...	651	1,085		
Sleepers ... Sal ..	25	55		
Sleepers other than Teak and Sal ...	1,806	2,263		
Sal slabs ...	291	...		
Pieces marketable Teak ...	410	...		
Pieces marketable Sal ...	3	...		
Pieces marketable other than Teak and Sal ...	2,951	...		
Pieces marketable. Head loads ...	136	—		
Pieces marketable. Cart loads ...	14	...		
Poles ... Teak ...	18,193	...		
Poles ... Sal ...	116	...		
Poles other than Teak and Sal ...	2,603	...		
Teak planks ...	30	21		
Planks other than Teak and Sal ...	98	39		
Fuel c. ft. ...	...	10,321		
Do. maunds ...	979	...		
Do. cart loads ...	297	...		
Do. head loads ...	141	...		
Charcoal maunds ...	285	...		
Do. cart loads ...	1	...		
Hurra maunds ...	2,785	...		
Hides do. ..	42	...		
Mohwa do. ...	42	...		
Mohwa flower maunds ...	150	...		
Honey and wax do. ...	9	...		
Lac maunds. ...	40	...		
Hides ...	42	...		
Mohwa maunds ...	42	...		
Mohwa flowers maunds ...	150	...		
Honey and wax do. ...	9	...		
Lac do. ..	40	...		
Gum koodoo ...	1	...		
Gulli do. ...	2	...		
Behra head loads ...	2	...		
Indian corn stalk cart loads.	1	...		
Cawli flower plants ...	502	...		
Dallees bundles ...	17	...		
Kurbee do. ..	2,495	...		
Gur maunds ...	5	...		
Skin ...	1	...		
Fruits ...	2,830	...		
Teekur maunds ...	130	...		
Fruits pais ...	156	...		
Vegetable maunds ...	11	...		
Grain do. ...	38	...		
Do mani ...	1	...		
Bambus ...	146,399	...		
Do. cart loads ...	41	...		
Grass poolas ...	867,647	...		
Do. head loads ...	50	...	1,053,559	17,738
LOST OR WRITTEN OFF AS USELESS.				
Boats ...	1	...		
Honey maunds ...	1	...		
Grain do. ..	7	...		
Teak poles ...	368	...		
Teak leaves bundles ...	25	...		
Bambus ...	286	...		
Grass poolas ...	38,796	...	39,424	...

Gum koodoo ...	1	...		
Gullee maunds ...	2	...		
Behra head loads ...	2	...		
Indian corn stalk cart loads	1	...		
Canli flower plants ...	502	...		
Dallees bundles ...	17	...		
Kurbee do. ...	2,495	...		
Gur maunds ...	5	...		
Skin ...	1	...		
Fruits ...	2,830	...		
Teekur maunds ...	130	...		
Fruits Pais ...	156	...		
Vegetable maunds ..	11	...		
Grain maunds ...	38	...		
Do. mani ...	1	...		
Bambus ...	146,399	...		
Do. cart loads ...	41	...		
Grass poolas ..	867,647	...		
Do. head loads ...	50	...		
			1,053,559	17,788
Received and treated under various description.				
Teak logs round ...	30	931		
Sal scantlings ...	6	37		
Teak planks ...	2	1		
Poles other than Teak and Sal ...	40	...		
Excess by remeasurement.				
Logs round ... Teak ...	...	14		
Logs round ... Sal ..	...	2		
Sal scantlings ..	...	1		
Teak planks ...	...	153		
Planks other than Teak and Sal ...	...	167		
			78	1,306
Grand Total ..	...	...	1,674,896	99,493

Used by the Department.				
Teak scantlings ...	16	8		
Sal scantlings ...	4	14		
Pieces marketable other than Teak and Sal ...	9	...		
Fuel maunds ...	10	...		
Charcoal maunds ...	4	...		
Mohwa do. ...		...		
Bambus ...	389	...		
Grass poolas ...	73,690	...		
			74,126	22
Issued and treated under various description.				
Sal logs squared ...	6	37		
Planks other than Teak and Sal ...	2	2		
			8	39
Decrease by remeasurement.				
Teak planks ...	...	21		
			...	21
Balance at close of the year.				
Logs other than Teak and Sal ..	27	95		
Scantlings ... Teak ...	6,031	6,952		
Scantlings ... Sal ...	292	468		
Sal sleepers ...	14	95		
Teak slabs ...	871	3,211		
Pieces marketable Teak ..	1	...		
Pieces marketable Sal ...	2	...		
Pieces marketable other than Teak and Sal ...	757	...		
Teak poles ...	294	...		
Poles other than Teak and Sal ...	5,603	...		
Teak planks ...	590	205		

Annual Form No. 62.—(*Conclud.*)

Particulars.	No. or quantity.	Cubic feet.	Total of each head.		Particulars.	No. or quantity.	Cubic feet.	Total of each head.	
			No. or quantity.	Cubic feet.				No. or quantity	Cubic feet.
					Planks other than Teak and Sal ...	3,418	1,101		
					Fuel maunds ...	195	...		
					Do. bundle ...	6	...		
					Charcoal maunds ...	9	...		
					Boats ...	13	...		
					Gum do. ...	1	...		
					Bhibas do. ...	2	...		
					Kossa ...	127	...		
					Bambus ...	16,082	...		
					Grass poolas ...	137,069	...		
								171,404	12,127
Grand Total ...			1,674,896	99,493	Grand Total		...	1,674,896	99,493

FORM No. 63.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Timber and other produce cut, collected and removed from the Forest by consumers or purchasers including pasture during the year 1882-83.

Division.	Produce removed. Description.	No. or quantity	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p	
Direction ...	Bambus ...	11,585	72 6 6	72 6 6	
	Total Bambus ...	11,585	72 6 6	72 6 6	
	Grass cart loads ...	81	18 13 3	18 13 3	
	Do. kawar loads ..	21	0 12 0	0 12 0	
	Do. bangy loads ...	116	3 11 0	3 11 0	
	Do. head loads ...	6	0 1 6	0 1 6	
	Total Grass ...	224	23 5 9	23 5 9	
	Total Revenue under II ...	...	95 12 3	95 12 3	
Mandla Division.	Sal pieces ...	1	0 4 0	0 4 0	
	Pieces of wood other than teak and sal ...	38	11 2 0	11 2 0	
	Total Timber ...	39	11 6 0	11 6 0	
	Firewood pieces ...	50	14 8 0	14 8 0	
	Do. cart loads ...	27	8 7 0	8 7 0	
	Do. bangy loads ...	249	5 7 9	5 7 9	
	Do. head loads ...	128	5 4 0	5 4 0	
	Do. kawar loads ...	28	0 7 0	0 7 0	
	Do. Maunds ...	16	1 0 6	1 0 6	
	Do. contract ...	...	2 12 0	2 12 0	
	Total Firewood ..	498	37 14 3	37 14 3	
	Bambus No. ...	16,599	156 11 2	156 11 2	
	Do head loads ...	6	1 2 0	1 2 0	
	Total Bambus ...	16,605	157 13 2	157 13 2	
	Grass Bundles ...	940,544	238 14 7	238 14 7	
	Do. head loads ...	141	2 3 3	2 3 3	
	Do. kawar loads ...	11	0 8 3	0 8 3	
	Do. cart loads ...	4	1 0 0	1 0 0	
	Do. poolas ...	800	1 0 0	1 0 0	
	Do. auction ...	...	7 8 0	7 8 0	
	Do. contract ...	...	86 8 0	86 8 0	
	Grazing cows ...	7,458	983 14 0	983 14 0	
	Do. buffaloes ...	1,012	220 2 6	220 2 6	
	Do. bullocks ...	49	6 2 0	6 2 0	
	Do. bullocks and cows ...	37	16 0 0	16 0 0	
	Total Grazing ...	950,056	1,563 12 7	1,563 12 7	
	Leather No. ...	1	1 0 0	1 0 0	
	Hides No. ...	16	18 15 0	18 15 0	
	Skins No. ...	3	3 4 0	3 4 0	

FORM No. 63.—(Contd.)

Division.	Produce removed			Amount of revenue.			Amount actually realized during the year.			Remarks.
	Description.		No. or quantity.							
				Rs.	a.	p.	Rs.	a.	p	
Mandla Division.	Chironji	Seers ...	47	3	9	7	3	9	7	
	Fruits	...	12	0	12	0	0	12	0	
	Mohwa flowers, &c.	Maunds ..	4	4	8	0	4	8	0	
	Do.	Seers ...	4	8	0	3	8	0	3	
	Other minor produce, kawar loads	...	150	14	5	0	14	5	0	
	Do.	Bundles ..	180	8	8	0	8	8	0	
	Do.	head loads ...	251	15	11	0	15	11	0	
	Do.	bangy loads .	105	7	13	0	7	13	0	
	Do.	auction ...	...	7	12	0	7	12	0	
		Total ...	773	94	1	10	94	1	10	
	Total Revenue under II	...	...	1,864	15	10	1,864	15	10	
Betul Division...	Trees other than teak and sal	...	64	26	6	0	26	6	0	
	Teak wood pieces	..	3,178	2,341	0	9	2,341	0	9	
	Do. karas loads	..	628	884	8	0	884	8	0	
	Pieces, wood other than teak and sal cart loads	..	46	123	8	0	123	8	0	
	Do. head loads	..	1,136	92	6	3	92	6	3	
	Do. karas loads	..	290	295	9	0	295	9	0	
	Do.	No. ..	1,353	2,702	12	0	2,702	12	0	
	Building woods, cart loads	..	1,779	2,074	7	6	2,074	7	6	
	Do. karas loads	..	856	840	1	3	840	1	3	
	Do. head loads	..	15,239	1,389	1	3	1,389	1	3	
	Do. bull loads	..	36	24	0	0	24	0	0	
	Do.	No. ..	241	45	4	0	45	4	0	
		Total Timber ..	24,846	10,839	0	0	10,839	0	0	
	Fuel cart loads	...	3,096	585	10	0	585	10	0	
	Do. head loads	...	19,253	593	15	3	593	15	3	
	Do. bull loads	...	550	48	15	0	48	15	0	
	Do. karas loads	...	186	12	10	0	12	10	0	
	Do. garkarach licenses	..	...	3,595	0	0	3,595	0	0	
	Charcoal, bull loads	...	133	27	6	0	27	6	0	
	Do. head loads	...	995	99	0	9	99	0	9	
	Do. cart loads	...	2	3	0	0	3	0	0	
		Total Fuel ...	24,215	4,965	9	0	4,965	9	0	
	Bambus	...	475,191	5,993	12	3	5,993	12	3	
	Do. head loads	...	470	48	11	0	48	11	0	
	Do. auction	...	345	3	2	0	3	2	0	
		Total Bambus ...	4,76,006	6,045	9	3	6,045	9	3	
	Grazing bullocks	...	265,944	16,270	15	3	16,270	15	3	
	Do. buffaloes	...	19,811	5,131	7	0	5,131	7	0	
	Do. goats .	...	45,305	656	13	6	656	13	6	
	Do. asses	...	2,054	31	4	2	31	4	2	
	Do. camels	...	25	1	2	9	1	2	9	
	Grass, cart loads	...	3,468	721	4	0	721	4	0	
	Do. bull loads	...	4,479	410	8	6	410	8	6	
	Do. head loads	...	35,528	902	6	6	902	6	6	
	Do. head loads auction	...	92	4	2	3	4	2	3	
		Total Grazing ...	376,706	24,129	15	11	24,129	15	11	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.		No. or quantity	Amount of revenue. Rs.	a.	p	Amount actually realized during the year. Rs.	a.	p.	Remarks.
	Other minor produce	Nos. ..	397	63	8	0	63	8	0	
	Do. cart loads	..	237	75	12	0	75	12	0	
	Do. bull loads	..	118	29	8	0	29	8	0	
	Do. 2 bull cart loads	..	6	1	8	0	1	8	0	
	Do.	c.ft. ..	4,600	27	8	0	27	8	0	
	Other minor produce head loads	..	366	24	11	3	24	11	3	
	2nd Class Reserved Forests	..	...	1,238	6	0	1,238	6	0	
			14,403	1,694	10	7	1,694	10	7	
	Total Revenue under R,II	...	...	68,313	7	0	68,313	7	0	
Chanda Division.	Commutation	..	...	13,138	5	9	13,138	5	9	
	Total	...	...	13,138	5	9	13,138	5	9	
	Wood other than Teak and Sal	Nos.	80,454	4,359	0	5	4,359	0	5	
	Do head loads	...	341	61	11	9	61	11	9	
	2nd Class Reserved Forests	..	...	3,616	10	7	3,616	10	7	
	Total Timber	...	80,795	8,037	6	9	8,037	6	9	
	Fuel cart loads	...	1,341	167	10	0	167	10	0	
	Do head loads	...	241	0	6	0	0	6	0	
	Charcoal head loads	..	1,753	109	9	0	109	9	0	
	Do. kawar loads	..	33	4	2	0	4	2	0	
	2nd Class Reserved Forest	...	...	10,930	12	3	10,930	12	3	
			3,468	11,212	7	3	11,212	7	3	
	Bambus	Nos.	918,909	11,265	11	8	11,265	11	8	
	Bambu materials	Nos.	738,214	1,472	14	6	1,472	14	6	
	Do. cart loads	..	97	24	4	0	24	4	0	
	2nd Class Reserved Forest	..	...	4,770	1	11	4,770	1	11	
			1,686,320	17,533	0	1	17,533	0	1	
	Grazing cows and bullocks	...	11,660	1,503	10	6	1,503	10	6	
	Do. sheep and goats	..	1,572	49	2	0	49	2	0	
	Do. buffaloes	...	1,222	326	12	0	326	12	0	
	Grass cart loads	...	6,609	1,627	2	8	1,627	2	8	
	Do. head loads	...	989	19	14	6	19	14	6	
	Do. poolas	..	21	0	10	6	0	10	6	
	2nd Class Reserved Forest	..	...	37,160	7	0	37,160	7	0	
			22,073	40,687	11	2	40,687	11	2	
	Skins	...	230	28	12	0	28	12	0	
	Mohwa	contract ...	...	162	10	0	162	10	0	
	Mohran	do. ...	...	338	13	0	338	13	0	
	2nd Class Reserved Forests	..		4,868	7	11	4,868	7	11	
	Total	...	230	5,398	10	11	5,398	10	11	
	Total Revenue under R. II	..	...	96,007	9	11	96,007	9	11	
Seoni Division.	Commutation	...	30,124	9,584	10	0	9,584	10	0	
	Total	...	30,124	9,584	10	0	9,584	10	0	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p.	
	Teak wood Nos. ..	8,204	658 15 10	658 15 10	
	Do. auction ...	...	3 4 0	3 4 0	
	Building wood cart loads ..	1,932	1,990 0 0	1,990 0 0	
	Do. head loads ..	10,152	368 3 6	368 3 6	
	Do. bangy loads ..	10	5 0 0	5 0 0	
	Do. auction ..	...	3 7 6	3 7 6	
	Do. Nos. ...	16,324	837 13 11	837 13 11	
	Wood other than teak and sal Nos...	14,018	1,477 1 9	1,477 1 9	
	Do. auction ..	560	40 12 3	40 12 3	
	Do. cart loads ...	1,096	461 0 0	461 0 0	
	Do. bangy loads ...	14	7 0 0	7 0 0	
	Do. head loads ..	2,333	79 15 6	79 15 6	
		54,643	5,932 10 3	5,932 10 3	
	Fuel cart loads ..	16,856	2,211 0 0	2,211 0 0	
	Do. head loads ..	56,870	476 5 6	476 5 6	
	Do. Nos. ..	13	35 4 0	35 4 0	
	Do. auction ..	...	3 5 10	3 5 10	
	Do. contract ..	...	283 0 0	283 0 0	
	Charcoal head loads ...	5,840	385 15 3	385 15 3	
	Do. cart loads ..	552	553 0 0	553 0 0	
	Do. head loads auction ..	2	0 1 6	0 1 6	
	Do. cart loads auction ...	2	1 2 0	1 2 0	
	Total ...	80,135	3,949 2 1	3,949 2 1	
	Bambus Nos. ...	1,202,528	11,576 14 3	11,576 14 3	
	Do. cart loads ..	2,328	1,173 6 0	1,173 6 0	
	Do. head loads ..	9,894	639 13 0	639 13 0	
	Do. yoke loads ...	5	1 4 0	1 4 0	
	Do. auction ...	400	8 0 0	8 0 0	
	Total ...	1,215,155	13,399 5 3	13,399 5 3	
	Grazing cows and bullocks ...	181,487	27,380 12 3	27,380 12 3	
	Do. buffaloes ..	27,553	5,392 3 0	5,392 3 0	
	Grazing goats ...	13,528	408 12 9	408 12 9	
	Do. ponies ...	17	3 3 0	3 3 0	
	Grass poolas ...	27,170	145 3 6	145 3 6	
	Do. cart loads ...	7,322	893 5 11	893 5 11	
	Do. head loads ...	2,065	32 8 0	32 8 0	
	Do. contract ...	...	200 0 0	200 0 0	
	Total Grazing ...	258,942	34,456 0 5	34,456 0 5	
	Mohwa contract ...	...	86 2 0	86 2 0	
	Fruits cart loads ..	6	1 8 0	1 8 0	
	Honey seers ...	23	5 12 0	5 12 0	
	Wax seers ...	4	2 0 0	2 0 0	
	Lac contract ...	...	26 0 0	26 0 0	
	Horns Nos. ...	3	1 1 6	1 1 6	
	Hurra contract ...	...	6 12 0	6 12 0	
	Do. maunds ...	1	4 10 0	4 10 0	
	Do. seers ...	5			
	Lime stone cart loads ...	39	20 8 0	20 8 0	
	Do. banghy loads ...	226	14 2 0	14 2 0	
	Do. contract ...	...	3 0 0	3 0 0	
	Do. head loads ...	36	2 4 0	2 4 0	
	Skins contract ..	...	124 0 0	124 0 0	
	Other minor produce Nos. ...	374	10 1 0	10 1 0	
	Do. head loads ..	2,399	98 14 10	98 14 10	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p.	
	Other minor produce, yoke loads ...	22	4 0 0	4 0 0	
	Do. bangy loads ...	152	19 0 0	19 0 0	
	Do. contract ...	...	3,719 4 6	3,719 4 6	
		3,270	4,148 15 10	4,148 15 10	
	Total Revenue under R. II ...	...	71,470 11 10	71,470 11 10	
Saugor Division.	Commutation ...	...	531 1 0	531 1 0	
	Total ...	...	531 1 0	531 1 0	
	Teak trees ...	3	2 10 0	2 10 0	
	Teak other than teak and sal ..	156	161 13 6	161 13 6	
	Teak wood Nos. ..	6,170	499 11 0	499 11 0	
	Do. head loads ...	2,301	232 5 1	232 5 1	
	Building wood Nos. ...	6	0 15 0	0 15 0	
	Do. cart loads ..	1,781	2,008 2 0	2,008 2 0	
	Do. buffaloe loads ...	856	181 14 0	181 14 0	
	Do. head loads ..	26,618	1,750 13 0	1,750 13 0	
	Do. yoke loads ...	5	17 4 0	17 4 0	
	Wood other than teak and sal ...	4,699	529 0 11	529 0 11	
	Do. head loads ...	287	16 8 0	16 8 0	
	Do. buffaloe loads ...	5	1 9 0	1 9 0	
	Do. contract ...	...	646 15 3	646 15 3	
	Total Timber ...	42,887	6,049 8 9	6,049 8 9	
	Firewood cart loads ...	32,350	4,850 3 0	4,850 3 0	
	Do. head loads ..	166,866	962 4 3	962 4 3	
	Do. buffaloe loads ...	5,731	402 3 10	402 3 10	
	Do. poney loads ...	154	12 11 3	12 11 3	
	Do. donkey loads ...	114	7 15 0	7 15 0	
	Basket loads ...	1,017	23 2 11	23 2 11	
	Do. yoke loads ...	6	17 4 0	17 4 0	
	Do. bull loads ...	3	0 11 0	0 11 0	
	Do. auction ...	19	20 6 6	20 6 6	
	Charcoal buffaloe loads ...	547	170 15 0	170 15 0	
	Do. head loads ...	8,965	559 9 0	559 9 0	
	Do. cart loads ..	76	55 1 0	55 1 0	
	Do. auction ...	...	3 10 8	3 10 8	
	Total ...	215,848	7,086 1 5	7,086 1 5	
	Bumbus Nos.	386,984	4,052 10 11	4,052 10 11	
	Total ...	386,984	4,052 10 11	4,052 10 11	
	Grazing buffaloes ...	78,490	12,946 14 7	12,946 14 7	
	Do. cows and bullocks ...	177,992	23,173 14 1	23,173 14 1	
	Do. goats and sheep ...	14,676	497 8 10	497 8 10	
	Do. camels ...	8	5 10 8	5 10 8	
	Do. donkeys ...	37	4 9 0	4 9 0	
	Do. ponies ...	963	82 2 10	82 2 10	
	Grass cart loads ..	2,529	467 14 6	467 14 6	
	Do. head loads ...	1,683	255 3 9	255 3 9	
	Do. buffaloe loads ...	454	27 6 3	27 6 3	
	Do. poney loads ...	2,160	135 0 0	135 0 0	
	Do. poolas ...	1,100	3 4 0	3 4 0	
	Do. contract ...	...	2,072 5 11	2,072 5 11	
	Total ...	280,092	39,671 14 5	30,671 14 5	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue. Rs.	a.	p.	Amount actually realized during the year. Rs.	p.	a	Remarks.
	Mohwa contract	...	...	2,451	14	5	2,451	14	5	
	Lime stone cart loads	...	1,652	115	14	0	115	14	0	
	Do. buffaloe loads	...	2,989	97	14	9	97	14	9	
	Do. poney loads	...	25	0	8	4	0	8	4	
	Do. donkey loads	...	100	1	9	0	1	9	0	
	Do. head loads	...	156	1	6	7	1	6	7	
	Do. contract	...	...	76	11	2	76	11	2	
	Hurra seers	...	24	0	7	6	0	7	6	
	Do. contract	..	...	68	12	0	68	12	0	
	Leather No.	..	1	0	8	0	0	8	0	
	Fruits head loads	...	43	3	5	6	3	5	6	
	Do. contract	...	...	28	7	8	28	7	8	
	Lac contract	...	...	4,275	14	9	4,275	14	9	
	Hides No.	...	28	29	1	0	29	1	0	
	Do. auction	...	...	1,374	5	8	1,374	5	8	
	Honey contract	...	...	296	0	0	296	0	0	
	Do. chattacks	...	2	0	8	0	0	8	0	
	Gum contract	...	...	833	14	0	833	14	0	
	Other minor produce head loads	...	1,179	473	2	0	473	2	0	
	Do. head loads	...	12,591	464	4	2	464	4	2	
	Do. buffaloe loads	...	812	80	0	6	80	0	6	
	Do. poney loads	...	102	1	7	3	1	7	3	
	Do. yoke loads	...	4	11	4	9	11	4	9	
	Do. donkey loads	..	325	4	0	6	4	0	6	
	Do. contract	...	...	505	9	4	505	9	4	
	Do. seers	...	30	4	10	1	4	10	1	
	Do. maunds	...	3	5	3	6	5	3	6	
	Do. Nos.	..	80	3	6	0	3	6	0	
			20,146	11,210	2	5	11,210	2	5	
	Total Revenue under R. II	...	...	68,601	6	11	68,601	6	11	
Nagpur Division	Trees other than teak and sal	...	4	11	8	0	11	8	0	
	Woods other do. Nos.	...	6,949	802	11	0	802	11	0	
	Do. cart loads	...	1,452	3,877	0	0	3,877	0	0	
	Do. head loads	...	387	146	12	0	146	12	0	
			8,792	4,837	15	0	4,837	15	0	
	Firewood head loads	..	35,739	715	15	0	715	15	0	
	Do. cart loads	...	12,313	3,108	5	3	3,108	5	3	
	Do. auction No.	...	48	18	10	0	18	10	0	
			48,100	3,842	14	3	8,842	14	3	
	Bambus cart loads	...	78	202	8	0	202	8	0	
	Do. head loads	...	3,988	644	11	0	644	11	0	
	Do. auction No.	...	127	5	15	9	5	15	9	
			4,193	853	2	9	853	2	9	
	Grazing cows and bullocks	...	87,230	9,234	8	0	9,234	8	0	
	Do. buffaloes	...	4,890	1,243	3	0	1,243	3	0	
	Do. horses	...	48	6	0	0	6	0	0	
	Do. sheep and goats	...	41,328	1,559	11	0	1,550	11	0	
	Do. on licenses	...	...	3,514	15	6	3,432	11	6	
			1,33,496	15,558	5	6	15,476	1	6	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue. Rs. a. p.	Amount actually realized during the year. Rs. a. p.	Remarks.
	Mohwa, gulli, chironji, &c. contract ...	...	3,043 12 0	3,043 12 0	
	Mohwa cart loads ..	21	54 0 0	54 0 0	
	Do. bull loads ...	314	212 9 0	212 9 0	
	Do. head loads ...	183	21 1 0	21 1 0	
	Skins bull loads ...	250	225 1 0	225 1 0	
	Do. No. ..	26	19 12 0	19 12 0	
	Do. head loads ...	253	28 0 0	28 0 0	
	Do. contract ..	...	37 0 0	37 0 0	
	Do. cart loads ...	171	356 0 0	356 0 0	
	Do. ass loads ..	2	0 8 0	0 8 0	
	Do. auction ..	14	6 12 0	6 12 0	
	Horns head loads ...	395	47 12 0	47 12 0	
	Do. No. ...	123	14 6 3	14 6 3	
	Do. bull loads ...	76	69 8 0	69 8 0	
	Do. cart loads ..	3	8 0 0	8 0 0	
	Do. contract ...	...	3 0 0	3 0 0	
	Hurra Maunds ...	3	3 5 0	3 5 0	
	Do. Seers ..	12			
	Do. contract ...	...	2,230 7 0	2,230 7 0	
	Do. bull loads ...	312	83 9 0	83 9 0	
	Do. cart loads ...	20	30 0 0	30 0 0	
	Lac Maunds ...	2	42 8 0	42 8 0	
	Do. Seers ...	12			
	Do. bull loads ...	28	44 0 0	44 0 0	
	Do. head loads ...	73	15 4 0	15 4 0	
	Chironji do. ...	127	24 0 0	24 0 0	
	Do. bull loads ...	81	107 0 0	107 0 0	
	Do. cart loads ...	4	20 0 0	20 0 0	
	Do. ass loads ..	1	0 6 0	0 6 0	
	Gum head loads ...	4	1 8 0	1 8 0	
	Do. bull loads ..	6	12 10 0	12 10 0	
	Do. cart loads ...	6	19 8 0	19 8 0	
	Lime stones and other stones, &c. cart loads ...	334	130 0 0	130 0 0	
	Do. bull loads ...	188	46 0 6	46 0 6	
	Do. head loads ...	9	0 9 0	0 9 0	
	Other minor produce head loads ...	2,373	164 6 3	164 6 3	
	Do. bull loads ...	213	87 13 0	87 13 0	
	Do. cart loads ...	23	18 6 0	18 6 0	
	Do. contract ...	...	38 0 0	38 0 0	
	Do. auction ...	...	1 4 0	1 4 0	
	Do. ass loads ...	195	16 0 6	16 0 6	
	Do. No. ...	2	1 10 0	1 10 0	
	Total ...	5,859	7,285 3 6	7,285 3 6	
	Total Revenue under II ...	...	53,265 5 8	53,265 5 8	
Hoshangabad Division ...	Commutation ...	...	4,514 4 0	4,514 4 0	
	Total ...	...	4,514 4 0	4,514 4 0	
	Trees other than teak and sal ...	6	42 0 0	42 0 0	
	Teak wood pieces ...	12,813	5,350 14 0	5,350 14 0	
	Do. c. ft. ...	2,752	1,470 15 0	1,470 15 0	
	Do. 2 bullock cart load ...	386	667 12 0	667 12 0	
	Do. 4 do. ..	1	6 0 0	6 0 0	
	Do. head loads ...	8	0 14 0	0 14 0	
	Do. joti loads ...	3	1 2 0	1 2 0	

FORM No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.			Amount actually realized during the year.			Remarks.
	Description.	No. or quantity.	Rs.	a.	p.	Rs.	a.	p.	
	Wood other than teak and sal ...	3,042	1,082	7	0	1,082	7	0	
	Do. 2 bullock cart loads ..	402	1,440	3	0	1,440	3	0	
	Do. 4 do. ..	29	147	0	0	147	0	0	
	Do. head loads ...	385	59	4	0	59	4	0	
	Do. joti loads ...	168	135	0	0	135	0	0	
	Do. bull loads ...	1	1	8	0	1	8	0	
	Do. poney loads ...	2	3	0	0	3	0	0	
	Do. auction ...	668	80	5	0	80	5	0	
	Building wood 4 bullock cart loads...	113	278	6	0	278	6	0	
	Do. 2 do. ...	5,454	9,000	12	0	9,000	12	0	
	Do. joti loads ...	535	210	10	0	210	10	0	
	Do. head loads ...	16,442	1,456	15	6	1,456	15	6	
	Do. bull loads ..	1	0	5	9	0	5	9	
	Building wood buffaloe loads ...	71	29	15	3	29	15	3	
	Do. Nos.	100	100	0	0	100	0	0	
	Do. auction ..	612	73	5	3	73	5	3	
	Total Timber ...	44,044	21,638	9	9	21,638	9	9	
	Fire wood 4 bullock cart loads ...	590	178	8	0	178	8	0	
	Do. 2 do. ...	29,945	4,168	2	0	4,168	2	0	
	Do. 2 do. auction ...	10	1	2	0	1	2	0	
	Do. head loads ...	37,900	348	7	11	348	7	11	
	Do. donkey loads ...	992	23	9	6	23	9	6	
	Do. poney loads ...	148	4	3	0	4	3	0	
	Do. joti loads ...	2	0	1	0	0	1	0	
	Charcoal head loads ...	3,715	232	13	0	232	13	0	
	Do. 2 bullock cart loads ...	57	85	8	0	85	8	0	
	Total Firewood ..	73,359	5,042	6	5	5,042	6	5	
	Bambus Nos	1,231,005	11,480	0	6	11,480	0	6	
	Do. auction ...	1,039	17	7	9	17	7	9	
	Bambu materials head loads ...	8,427	526	9	0	526	9	0	
	Do. ...	1,136	73	11	6	73	11	6	
	Do. 2 bullock cart loads ...	30	45	8	0	45	8	0	
	Total Bambus ...	1,241,637	12,143	4	9	12,143	4	9	
	Grazing buffaloes ..	27,786	5,922	13	2	5,922	13	2	
	Do. bullocks and cows ...	267,364	20,296	13	0	20,296	13	0	
	Do. camels ...	178	42	4	0	42	4	0	
	Do. sheep and goats ...	47,271	333	8	7	333	8	7	
	Do. ponies and donkeys ...	1,064	29	15	6	29	15	6	
	Grass 4 bullock cart loads ...	110	43	2	0	43	2	0	
	Do. 2 do. ...	4,996	1,010	4	0	1,010	4	0	
	Do. head loads ...	22,073	213	15	5	213	15	5	
	Do. poolas ...	9,187	4	9	6	4	9	6	
	Do. do. auction ...	5,000	1	2	0	1	2	0	
	Do. buffalo loads ...	12	0	12	0	0	12	0	
	Do. auction ...	...	734	8	0	734	8	0	
	Do. contract ...	...	8	0	0	8	0	0	
	Do. poney loads ...	1	0	2	0	0	2	0	
	Grass bir, auction Nos.	3	49	0	6	49	0	6	
	Total Grazing ...	385,045	28,690	13	8	28,690	13	8	
	Mohwa, 2 bullock cart loads ...	54	108	0	0	108	0	0	
	Do. maunds ...	392	578	7	8	578	7	8	
	Mohwa head loads ..	607	262	13	0	262	13	0	
	Do. poney loads ...	13	7	6	0	7	6	0	

FORM No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs. a. p.	Rs. a. p	
	Mohwa manees ...	35	52 8 0	52 8 0	
	Do. contract ..	...	205 12 0	205 12 0	
	Chirongi, maunds ...	102	41 0 5	41 0 5	
	Do. seers ...	17			
	Do. head loads .	4	3 6 0	3 6 0	
	Mango crop auction ..	...	137 8 0	137 8 0	
	Lac head loads ...	28	22 11 0	22 11 0	
	Do. seers auction ..	31	6 12 0	6 12 0	
	Do. contract ..	...	408 8 0	408 8 0	
	Do. maunds ..	4	4 12 0	4 12 0	
	Hides ..	819	775 3 0	775 3 0	
	Do. contract ..	...	19 0 0	19 0 0	
	Do. head loads ..	9	0 11 0	0 11 0	
	Do. auction ..	...	42 13 0	42 13 0	
	Gum head loads ..	63	10 6 9	10 6 9	
	Do. poney loads ...	15	26 4 0	26 4 0	
	Do. maunds ...	137	18 12 9	18 12 9	
	Do. seers ..	25			
	Do. 2 bullock cart loads ...	5	30 0 0	30 0 0	
	Do. bull loads ...	8	14 0 0	14 0 0	
	Horns No. ...	540	9 14 6	9 14 6	
	Do. head loads ...	122	3 8 9	3 8 9	
	Do. poney loads ..	41	16 2 0	16 2 0	
	Do. auction ...	...	6 0 0	6 0 0	
	Do. 2 bullock cart loads ...	1	1 0 0	1 0 0	
	Fruit head loads ...	856	26 11 9	26 11 9	
	Do. contract ...	...	5 0 0	5 0 0	
	Hurra head loads ...	2	0 13 6	0 13 6	
	Do. auction ...	...	78 0 0	78 0 0	
	Do. contract ...	...	490 0 0	490 0 0	
	Do. pallas ...	24	12 0 0	12 0 0	
	Honey maunds ...	12	17 6 3	17 6 3	
	Do. seers ...	27			
	Do. head loads ...	5	8 5 9	8 5 9	
	Wax seers ...	51	7 7 6	7 7 6	
	Lime and other stones &c, 2 bullock cart loads ...	62	11 11 6	11 11 6	
	Do. head loads ...	31	0 8 0	0 8 0	
	Other minor produce 2 bull cart loads	5,237	1,767 7 0	1,767 7 0	
	Do. bull loads ..	423	13 14 0	13 14 0	
	Other minor produce banghy loads ...	4	0 4 0	0 4 0	
	Do. 4 bull cart loads ...	118	88 4 0	88 4 0	
	Do. donkey loads ...	423	13 3 6	13 3 6	
	Do. head loads ...	26,133	754 6 11	754 6 11	
	Do. contract ...	...	52 1 1	52 1 1	
	Do. buffaloe loads ..	32	3 15 6	3 15 6	
	Do. poney loads ...	11	1 3 6	1 3 6	
	Do. maunds ...	6	3 5 9	3 5 9	
	Do. seers ..	15			
	Do. pasarces ..	9	0 3 0	0 3 0	
	Do. carras load ...	20	3 4 9	3 4 9	
	Do. No. ..	473	57 5 6	57 5 6	
	Do. auction ..	...	65 8 0	65 8 0	
		37.046	6,295 10 7	6,295 10 7	
	Total Revenue under II ...	...	78,325 1 2	78,325 1 2	
Nimar Division..	Commutation ..	...	12,376 3 0	12,376 3 0	
	Total ..	...	12,376 3 0	12,376 3 0	

FORM No. 63.—(Contd.)

Division.	Produce removed.		Amount of revenue.			Amount actually realized during the year.			Remarks.
	Description.	No. or quantity.	Rs.	a.	p.	Rs.	a.	p.	
	Teak wood cart loads ..	1,070	5,931	8	0	5,931	8	0	
	Do. joti loads ...	436	551	8	0	551	8	0	
	Do. No. ...	948	926	1	4	926	1	4	
	Building wood head load ...	1,010	126	4	0	126	4	0	
	Do. cart loads ...	2	2	8	0	2	8	0	
	Trees other than teak and sal Nos....	9	41	0	3	41	0	3	
	Wood pieces other than teak & sal cart load ...	606	1,367	12	0	1,367	12	0	
	Do. Nos. ...	727	630	6	0	630	6	0	
	Do. joti loads ..	369	271	8	0	271	8	0	
	Do. 4 bullock cart loads ...	299	375	8	0	375	8	0	
	Do. auction ...	28	3	12	0	3	12	0	
	Do. 2 bullock cart loads ...	3	6	8	0	6	8	0	
	Do. head loads ...	244	23	2	0	23	2	0	
	2nd Class Reserved Forest ...	...	3,988	14	0	3,988	14	0	
	Total timber ..	5,751	14,246	3	7	14,246	3	7	
	Firewood 2 bullock cart load ..	3,641	910	6	0	910	6	0	
	Do. head load ...	163	6	15	6	6	15	6	
	Firewood bullock loads ...	14	1	5	0	1	5	0	
	2nd Class reserved forest ...	...	1,723	5	0	1,723	5	0	
	Total ...	3,818	2,641	15	6	2.641	15	6	
	Bambus Nos. ...	569,411	5,919	14	4	5,919	14	4	
	Do. head loads ...	9	0	9	0	0	9	0	
	Bambu materials Nos. ...	2	0	2	0	0	2	0	
	Do. head loads ...	42	2	10	0	2	10	0	
	2nd Class reserved forest ...	...	2,189	2	6	2,189	2	6	
	Total ...	569,464	8,112	5	10	8,112	5	10	
	Grazing cows and bullocks ...	29,700	4,118	7	0	4,118	7	0	
	Goats and sheep ...	2,197	76	6	0	76	6	0	
	Buffaloes ..	11,077	2,982	6	0	2,982	6	0	
	Grass 4 bullock cart loads ...	1,150	157	0	0	157	0	0	
	Do. cart load ...	2,350	335	13	0	335	13	0	
	Do. donga loads ...	2	3	0	0	3	0	0	
	Do. head loads ...	2,350	94	1	6	94	1	6	
	Do. bullock loads ...	2,052	48	4	0	48	4	0	
	Do bundles ...	34,130	204	12	6	204	12	6	
	2nd Class Reserved Forest ...	...	21,221	14	6	21,221	14	6	
		85,008	29,242	0	6	29,242	0	6	
	Mohwa head loads ...	888	47	4	0	47	4	0	
	Do. Maunds ...	1	2	0	0	2	0	0	
	Do. Bull loads ...	23	33	0	0	33	0	0	
	Chironji Pais ...	2	0	8	9	0	8	9	
	Fruits Nos. ...	1,100	2	7	6	2	7	6	
	Do. head loads ...	18	3	4	3	3	4	3	
	Honey head loads ...	13	9	8	0	9	8	0	
	Gum do. ...	97	8	11	0	8	11	0	
	Lime stones c.ft. ...	6,480	66	1	7	66	1	7	
	Horns Nos. ...	24	2	4	9	2	4	9	
	Do. cart loads ...	1	0	4	0	0	4	0	
	Hides Nos. ...	29	36	12	0	36	12	0	
	Skins Nos. ...	3	1	11	6	1	11	6	
	Do. contract ...	...	20	0	0	20	0	0	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
	Stones cart loads ...	2	1 0 0	1 0 0	
	Other minor produce ...	...	1,951 8 0	1,204 0 0	
		2	1,952 8 0	1,205 0 0	
	Total Revenue under R. II	...	27,044 13 6	26,215 1 6	
Chhindwara ...	Teak wood Nos. ...	876	114 2 9	114 2 9	
	Do. auction ...	...	1 15 0	1 15 0	
	Trees other than teak and sal ...	5	1 9 0	1 9 0	
	Other wood 2 bullock cart loads ...	2,719	1,936 12 9	1,936 12 9	
	Do. 4 do. ...	8	18 4 0	18 4 0	
	Do. head loads ...	6,428	296 4 1	296 4 1	
	Do. bull loads ...	2	2 8 6	2 8 6	
	Do. banghy loads ...	6	0 1 0	0 1 0	
	Do. yoke loads ...	4,888	1,877 1 4	1,877 1 4	
	Do. Nos. ...	8,696	1,002 6 4	1,002 6 4	
	Do. auction ...	...	48 0 3	48 0 3	
	Do. contract ...	...	122 0 6	122 0 6	
		23,628	5,421 1 6	5,421 1 6	
	Firewood 2 bull cart loads ...	5,958	799 7 3	799 7 3	
	Do. head loads ...	30,719	173 14 6	173 14 6	
	Do. yoke loads ...	1,893	94 11 3	94 11 3	
	Do. bull loads ...	1,621	50 13 0	50 13 0	
	Do. donkey loads ...	755	11 13 0	11 13 0	
	Do. banghy loads ...	167	1 11 10	1 11 10	
	Do. pieces ...	58	14 13 2	14 13 2	
	Charcoal buffaloe loads ...	8	6 0 0	6 0 0	
	Do. bull loads ...	198	99 0 0	99 0 0	
	Do. head loads ...	1,404	176 12 6	176 12 6	
	Charcoal cart loads ...	6	10 8 0	10 8 0	
	Do. auction lot ...	...	4 1 3	4 1 3	
	Do. on licenses ...	...	885 0 0	885 0 0	
		...	2,328 9 9	2,328 9 9	
	Bambus Nos. ...	164,845	3,129 5 5	3,129 5 5	
	Do. auction Nos. ...	306	17 5 8	17 5 8	
		165,151	3,146 11 1	3,146 11 1	
	Grazing bullocks and cows ...	124,188	11,281 10 0	11,281 10 0	
	Do. buffaloes ...	14,239	2,545 13 6	2,545 13 6	
	Do. sheep and goats ...	24,292	558 13 6	558 13 6	
	Do. horses ...	2	0 3 0	0 3 0	
	Grass cart loads ...	9,667	1,210 11 0	1,210 11 0	
	Do. head loads ...	39,363	205 4 3	205 4 3	
	Do. yoke loads ...	27	1 4 3	1 4 3	
	Do. bullock loads ...	605	19 1 0	19 1 0	
	Do. banghy loads ...	3	0 0 6	0 0 6	
	Do. auction poolas ...	3,775	16 9 0	16 9 0	
		216,161	15,839 6 0	15,839 6 0	
	Skins Nos. ...	9	10 2 0	10 2 0	
	Lime stones cart loads ...	8	3 12 0	3 12 0	
	Do. head loads ..	44	0 11 0	0 11 0	

FORM No. 63.—(Contd.)

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p.	
	Hides auction ...	...	0 8 0	0 8 0	
	Wax contract ...	...	0 0 0	3 0 0	
	Mohwa do. ...	...	2,140 11 3	2,140 11 3	
	Honey and wax do. ...	...	29 0 0	29 0 0	
	Gum leases ...	...	220 4 0	220 4 0	
	Hurra auction ...	...	255 15 9	255 15 9	
	Lac leases ...	...	92 8 0	92 8 0	
	Other produce 2 bullock cart loads ..	1,213	110 10 7	110 10 7	
	Do. yoke loads ...	174	8 3 3	8 3 3	
	Do. head loads ...	16,877	100 14 6	100 14 6	
	Do. bangy loads ...	226	2 5 8	2 5 8	
	Do. bull loads ...	14	0 7 0	0 7 0	
	Do. donkey loads ...	6	0 1 6	0 1 6	
	Do. Nos. ...	14	2 10 0	2 10 0	
	Do. auction ...	...	10 0 0	10 0 0	
	Do. pony loads ...	1	0 0 6	0 0 6	
		18,586	2,991 13 0	2,991 13 0	
	Total Revenue under R. II. ...	...	29,727 9 4	29,727 9 4	
Damoh ...	Commutation ...	...	4,515 8 1	4,515 8 1	
	Building wood cart loads ...	112	119 0 0	119 0 0	
	Do. yoke loads ...	366	138 12 0	138 12 0	
	Do. buffaloe loads ...	215	151 4 0	151 4 0	
	Do. head loads ...	45,042	1,965 14 0	1,965 14 0	
	Do. auction Nos. ...	14,370	1,095 13 6	1,095 13 6	
	Do. bull loads ...	11,753	1,599 12 0	1,599 12 0	
	Other wood bull loads ...	4,499	711 0 0	711 0 0	
	Do. head loads ...	14,898	661 3 0	661 3 0	
	Do. yoke loads ...	317	124 8 0	124 8 0	
	Do. cart loads ...	167	144 0 0	144 0 0	
	Do. auction Nos. ...	2,077	1,205 14 0	1,205 14 0	
	Total ...	93,816	7,917 0 6	7,917 0 6	
	Firewood cart loads ..	2,944	713 2 0	713 2 0	
	Do. bull loads ...	12,267	429 9 6	429 9 6	
	Do. head loads ...	156,172	2,171 11 10	2,171 11 10	
	Do. yoke loads ...	3,035	367 8 0	367 8 0	
	Do. buffaloe loads ...	308	18 12 6	18 12 6	
	Do. auction pieces ...	73	8 0 10	8 0 10	
	Charcoal head loads ...	16,333	920 5 3	920 5 3	
	Do. buffaloe loads ...	17	3 3 0	3 3 0	
	Do. bull loads ...	92	22 3 0	22 3 0	
	Do. auction lots ...	20	4 10 7	4 10 7	
	Do. kilns ...	14	28 0 0	28 0 0	
		1,91,275	4,687 2 6	4,687 2 6	
	Bambus No.	26,550	161 1 10	161 1 10	
	Do. auction No. ..	14,613	144 1 3	144 1 3	
	Do. head loads ...	16,707	1,008 0 10	1,008 0 10	
	Do. bull loads	1,474	276 6 0	276 6 0	
	Do. buffaloe loads ...	102	19 8 0	19 8 0	
	Do. cart loads	9	13 8 0	13 8 0	
		59,455	1,622 9 11	1,622 9 11	

FORM No. 63.—(Contd)

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
	Grazing cows and bulls ...	123.514	15,870 10 0	15,870 10 0	
	Do. buffaloes	36,776	7,048 2 0	7,048 2 0	
	Do. sheep and cows ...	62,958	6,962 2 0	6,962 2 0	
	Grass head loads	15,661	244 14 7	244 14 7	
	Do. cart loads	1	0 4 0	0 4 0	
	Do. poolas	250,391	120 13 2	120 13 2	
	Do. contract	...	210 8 5	210 8 5	
		489,301	30,457 4 2	30,457 4 2	
Damoh ...	Stones cart loads	3,761	235 4 0	235 4 0	
	Do buffaloe loads ...	10	6 0 0	6 0 0	
	Hurra maunds	3	8 6 6	8 6 6	
	Do. auction	...	66 0 0	66 0 0	
	Mohwa maunds	39	37 4 6	37 4 6	
	Do. contract	...	1,658 7 0	1,658 7 0	
	Honey auction	...	21 0 0	21 0 0	
	Honey and wax contract ...	...	180 0 0	180 0 0	
	Hides No.	624	411 3 0	411 3 0	
	Horns No.	3	0 4 6	0 4 6	
	Lac contract	...	10,212 0 0	10,212 0 0	
	Do. auction	...	1 8 0	1 8 0	
	Fruits maunds	9	72 4 0	72 4 0	
	Do. auction	...	54 3 1	54 3 1	
	Skins do.	...	4 1 0	4 1 0	
	Other minor produce, bundles ...	40	6 4 0	6 4 0	
	Do. cart loads	308	19 4 3	19 4 3	
	Do. No.	10	120 0 0	120 0 0	
	Do. auction	...	2 0 0	2 0 0	
		4,807	13,115 5 10	13,115 5 10	
	Total Revenue under R. II ...	...	62,314 15 0	62,314 15 0	

Form

FOREST DEPARTMENT,

Revenue derived from and Expenditure incurred on Timber and other

Name of Department.	Particulars of supplies.	Amount supplied.		Rate.	
		Number.	Cubic feet.	At.	Per.
				Rs. a. p.	
Public Works Department, Jubbulpore Division Central Provinces ...	Sal logs	2	78·61	1 8 0	c. ft.
	Sal scantling	37	96·32	1 12 0	...
	Do.	564	207·91	1 12 0	...
	Sal furdas	60	...	0 4 0	each.
	Charcoal	285	...	1½ mds.	Rs.
	Grass	2,21,000	...	8 0 0	100,000
Central Jail Jubbulpore ...	Sallogs	1	30·68	1 12 0	c. ft.
Rajputana and Malwa Railway ...	Sleepers	224	...	2 0 0	sleeper.
Public Works Department, Hoshangabad	Lime Kunker	...	2980	0 12 0	100 c. ft.
Wardha Coal Railway ...	Teak slabs	31	148·116	1 12 0	c. ft.
	Teak scantling	3	15·999	...	do.
	Do.	12	23·393	1 12 0	do.
	Do.	5	10·663	1 4 0	do.
	Do. planks	40	34·802	1 8 0	do.
	Do.	16	12·028	1 12 0	do.
	Do.	5	3·287	2 0 0	do.
	Do.	2	1·468	2 4 0	do.
	Dhaora logs	6	39·322	0 12 0	do.
	Gurraree props	1,290	4171·773	...	do.
	Bamboos	330	...	4 0 0	100
	Do.	25	...	5 0 0	do.
	Male bambus	27	...	0 4 0	Bambu.
Nagpur and Chhattisgarh State Railway ...	Teak logs	65	1808·091	...	do.
	Teak sleeper	600	...	3 4 0	Sleeper.
	Do. do.	50	...	do.	do.
	M. G. Saj sleepers	1,186	...	1 12 0	do.
Polic Department Wardha District ...	Teak scantling	50	54·137	1 2 0	c. ft.
	Teak slabs	6	21·438	1 12 0	do.
Jail Chanda ...	Bhera wood lots	50	...	0 8 0	Lot.
Deputy Commissioner, Chanda ...	Teak scantlings	6	3·286	1 2 0	c. ft.
	Teak planks	5	2·952	1 8 0	do.
Jail Wardha ...	Grass	1,000	...	7 8 0	1,000
	Do.	6,400	...	6 4 0	do.
	Total ...	2,33,383	...	...	...

No. 64.

CENTRAL PROVINCES.

produce sold to Public Departments, from Depots during the year 1882 83.

Amount of Revenue.			Cost to Forest Department.			Comparison of Revenue and Expenditure.		Remarks.
Due.	Received.	Outstanding.	Timber expenses under A 1	Quota of all other expenditure chargeable against Timber	Total.	Surplus	Deficit.	
Rs a. p.	Rs. a. p	Rs. a p	Rs a. p	Rs a p.	Rs. a. p	Rs. a. p.	Rs. a. p	
117 14 7	117 14 7	...	35 8 6	6 15 11	42 8 5	75 6 2	.....	
168 8 11	168 8 11	.....	52 8 1	7 6 7	59 14 8	108 10 3	.....	
363 13 5	363 13 5	.	114 13 3	15 2 7	129 15 10	233 13 7	.....	
15 0 0	15 0 0	.....	3 12 0	.....	3 12 0	11 4 0	.....	
190 0 0	190 0 0	.....	106 14 0	..	106 14 0	83 2 0	.....	
17 10 10	17 10 10	...		..		17 10 10	.....	
53 11 0	53 11 0	.....	13 5 2	2 11 8	16 0 10	37 10 2	.....	
448 0 0	448 0 0	.....	.....	28 0 0	28 0 0	420 0 0	.....	
22 5 7	22 5 7	.....	..	...	..	22 5 7	.....	
261 0 0	261 0 0	.....	166 0 0	61 0 0	227 0 0	34 0 0	.....	
28 0 0	28 0 0	.....	16 0 0	6 0 0	22 0 0	6 0 0	.....	
26 0 0	26 0 0	.....	23 0 0	8 0 0	31 0 0	.....	5 0 0	
13 0 0	13 0 0	.....	11 0 0	4 0 0	15 0 0	.....	2 0 0	
52 0 0	52 0 0	.....	17 0 0	6 0 0	23 0 0	29 0 0	.....	
21 0 0	21 0 0		6 0 0	2 0 0	8 0 0	13 0 0	.....	
7 0 0	7 0 0	.....	2 0 0	.....	2 0 0	5 0 0	.....	
3 0 0	3 0 0	.....	1 0 0	.....	1 0 0	2 0 0	.....	
29 0 0	29 0 0	.	10 0 0	4 0 0	14 0 0	15 0 0	.....	
2,086 0 0	2,086 0 0	.....	1,008 0 0	373 0 0	1,381 0 0	705 0 0	.....	
13 0 0	13 0 0	.....	5 0 0	2 0 0	7 0 0	6 0 0	.....	
1 0 0	1 0 0	.	1 0 0	.....	1 0 0	.....	.....	
7 0 0	7 0 0	...	1 0 0	.....	1 0 0	6 0 0	.....	
4,148 0 0	2,161 0 0	1,987 0 0	2,486 0 0	919 0 0	3,405 0 0	743 0 0	.....	
1,950 0 0	1,950 0 0	.	1,496 0 0	148 0 0	1,644 0 0	306 0 0	.....	
163 0 0	163 0 0	.....	100 0 0	37 0 0	137 0 0	26 0 0	.....	
2,075 0 0	2,075 0 0	.....	2,076 0 0	296 0 0	2,372 0 0	.....	297 0 0	
61 0 0	61 0 0	.....	54 0 0	20 0 0	74 0 0	...	13 0 0	
38 0 0	38 0 0	.....	24 0 0	8 0 0	32 0 0	6 0 0	.....	
25 0 0	25 0 0	...	8 0 0	3 0 0	11 0 0	14 0 0	.....	
4 0 0	4 0 0	.....	3 0 0	1 0 0	4 0 0	.....	.....	
4 0 0	4 0 0	.....	2 0 0	.....	2 0 0	2 0 0	.....	
7 8 0	7 8 0	.....	.....	.....	.....	.....	.....	
40 0 0	40 0 0	.....	..	23 0 0	23 0 0	24 8 0	.....	
12,459 8 4	10,472 8 4	1,987 0 0	7,842 13 0	1,981 4 9	9,824 1 9	2,952 6 7	317 0 0	

Deduct deficit	317 0 0
Balance to Department	2,635 6 7

FORM No. 65.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Abstract showing the values of timber and other Produce at sale Depots for the year 1882-83.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in the value.		Remarks.
	No.	Cubic ft.	Value.	No.	Cubic ft.	Value.	In favour of the year.	Against the year	
			Rs.			Rs.		Rs.	
Logs round ... Teak ...	1,994	26,383	16,604	...	...	...	...	...	
Logs round ... Sal ...	...	...	..	...	...	...	...	...	
Logs squared ... Teak ...	145	2,112	2,112	...	...	...	..	...	
Logs squared ... Sal ...	...	...	...	...	..	...	...	...	
Logs other than teak and Sal ...	198	344	172	27	95	50	...	...	
Teak scantlings ...	16,662	19,450	10,939	6,031	6,952	5,663	...	...	
Sal scantlings ...	139	158	79	292	468	468	...	...	
Sleepers ... Teak ...	...	...	..	...	...	...	...	...	
Sleepers ... Sal ...	3,690	5,975	4,613	14	95	37	...	...	
Sleepers other than Teak and Sal ...	31	46	15	...	...	...	...	...	
Teak slabs ...	913	3,398	2,124	871	3,211	4,725	...	...	
Teak planks ...	190	20	20	590	205	307	...	...	
Planks other than Teak and Sal ...	3,635	1,317	823	3,418	1,101	695	...	...	
Sal pieces marketable ..	3	...	1	...	...	...	...	...	
Pieces marketable. Teak ...	...	...	...	1	...	...	...	...	
Pieces marketable. Sal ...	...	...	...	2	...	...	...	...	
Pieces marketable other than Teak and Sal.	2,637	...	656	757	...	231	...	...	
Teak poles ...	264	...	86	294	...	121	...	...	
Poles other than Teak and Sal ...	4,271	...	218	5,603	...	105	...	...	
Boats ...	8	...	40	13	...	130	...	...	
Total ...	34,780	59,203	38,502	17,913	12,127	12,532	...	25,970	

Fuel bundles	..	...	...	...	6	...	6	...	...
Fuel maunds	..	192	...	64	195	...	49	...	...
Charcoal maunds	..	19	...	24	9	...	9	...	...
Total	...	211	...	88	210	...	64	...	24
Bamboos	..	13,480	...	2,126	16,082	...	415	...	...
Total	...	13,480	...	2,126	16,082	...	415	...	1,711
Honey maunds	..	5	...	54	...	...	...	...	...
Bhibas do.	..	2	...	2	2	...	1	...	...
Gum do.	...	2	...	8	1	...	4	...	...
Ropes	..	...	...	...	...	...	..	...	...
Grass poolas	..	293,143	...	2,624	137,069	...	1,078	...	...
Kosa	..	35	...	...	127	...	1	...	...
Lac maunds	..	2	..	20	...	...	...	...	...
Grain do.	...	4	...	8	...	...	...	...	...
Total	..	293,193	...	2,716	137,199	...	1,084	...	1,632
Grand Total	..	341,664	59,203	43,432	171,404	12,127	14,095	...	29,337
Elephants	..	6	...	4,051	6	...	3,646	...	...
Other live-stock	..	188	...	2,896	206	...	2,543	...	...
Machinery	..	...	...	20,854	...	...	18,964	...	...
Other dead-stock	..	...	...	22,359	...	...	20,884	...	...
Total	..	194	...	50,160	212	...	46,037	...	4,123
Grand Total	...	341,853	69,203	93,592	171,616	...	60,132	...	33,460

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Forest Buildings in the Central Provinces, costing over Rs. 200 each at the close of 1882-83.

Division.	Situation.	Discription of Building.	Original cost.		Cost of repairs during the year	Rent realized in 1882-83.	Remarks.
			Of buildings on hand at commencement of the year.	Of buildings constructed during the year.			
			Rs a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Mandla ..	Khitoli ...	Rest-house, 1 room and veranda, kutcha brick walls ...	400 0 0	...	8 15 3	.....	
	Kisli ...	Store-house, 4 rooms and veranda, pucka brick walls ...	...	446 0 0	.....	.....	
Hoshangabad ...	Head-quarters...	Small pucka bungalow ...	2,094 0 0	.....	159 0 0	.....	
Nimar ...	Kirgaon ...	Pucka Rest-house ...	965 0 0	.....	.....	.....	
	Punassa ..	Ditto ...	626 0 0	.....	34 3 0	.....	
	Head-quarters...	Small pucka bungalow ...	4,054 0 0	.....	.....	.....	
Chanda ...	Chanda Civil station ..	Terrace roof bungalow ...	8,000 0 0	.....	222 6 9	341 8 0	For portion of the building
	Moharli ...	Rest-house ...	500 0 0	.....	20 3 0	.....	
	Allapilli ...	Ditto ...	300 0 0	.....	16 13 0	.....	
Seoni ...	Korai ...	Small pucka Inspection bungalow ...	1,000 0 0	.....	10 8 0	.....	
Saugor ...	Garhakota ...	Pucka Inspection bungalow ...	1,000 0 0	.....	0 3 6	.....	
	Do. ...	Four roomed barrack, kutcha ...	...	210 0 0	.....	.....	

APPENDICES.

Appendix A.

Statement exhibiting the result of Forest tracts protected from fire during the dry season of 1882-83, compared with the previous year 1881-82.

Division.	Forests.	Area in acres.				Cost of area actually protected.					
		Under protection.		Actually protected.		Total.		Per square mile.		Per acre.	
		1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.
1st Class Reserves.						Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.		
Direction ...	Hathibari ...	2,123	2,123	2,123	2,123	81 4 8	86 12 8	24 8 1	26 2 7	7·352	7·849
	Kuntranala ..	3,548	3,548	...	665	53 8 8	69 12 4	.....	67 2 4	...	20·144
	Total ...	5,671	5,671	2,123	2,788	134 13 4	156 9 0	.....	.....	...	...
				Average for the Division ...			.....	40 10 4	35 14 11	12·194	10·780
Mandla ...	Banjar Valley ...	49,495	49,495	49,490	49,495	589 4 2	596 14 1	7 9 11	7 11 5	2·286	2·315
	Motinala ...	1,659	1,659	1,659	1,659	56 10 0	56 14 3	21 13 5	21 15 1	6·553	6·584
	Jugmandal ...	24,503	24,503	24,340	22,903	540 4 3	613 1 4	14 3 3	17 2 0	4·262	5·139
	Chuharigogarh ...	1,661	1,661	1,661	1,661	71 5 0	73 7 4	27 7 7	28 4 10	8·243	8·491
	Barela ...	7,153	7,153	7,153	6,997	152 5 0	162 6 2	13 10 0	14 13 7	4·088	4·456
	Airi ...	2,150	2,150	2,150	2,150	39 3 9	43 4 9	11 10 10	12 14 2	3 504	3 866
	Singrampur ...	6,555	6,555	6,550	6,555	134 12 9	167 11 9	13 2 8	16 6 0	3·950	4·913
	Bijeragogarh ...	21,188	21,188	21,188	21,188	487 5 3	481 13 6	14 11 6	14 8 10	4·416	4·367
	Lower Gour ..	2,000	2,000	2,000	2,000	71 14 9	73 2 7	23 0 2	23 6 6	6·904	7·023
	Total ...	116,364	116,364	116,191	114,605	2,143 0 11	2,268 11 9	.....	.....	...	...
				Average for the Division ..			.....	11 12 10	12 10 8	3·541	3·800

Hoshangabad	...	Rajaborari	...	102,720	102,720	102,070	102,120	518 11 2	763 9 10	3 2 4	4 12 7	0·975	1·436
		Saonligarh	...	78,080	78,080	64,640	77,274	301 11 7	629 0 2	2 15 8	5 3 4	0·895	1·563
		Bori	...	39,680	39,680	36,800	39,560	673 4 3	571 12 0	11 11 4	7 9 4	3·513	2·775
		Total	..	2,20,480	220,480	203,510	218,954	1,493 11 0	1,964 6 0	.....	.....	...	...
						Average for the Division		...	.....	4 11 1	5 11 10	1·409	1·723
Nimar	...	Kalibheet	...	62,080	62,080	61,811	61,958	254 15 9	335 6 3	2 10 2	3 7 4	0·792	1 039
		Punassa	...	91,720	91,920	7,110	87,304	954 8 4	1,026 9 5	85 14 8	7 8 5	25·776	2·258
		Chandgarh	.	61,440	61,440	54,145	61,172	697 15 4	536 1 3	8 4 1	5 9 9	2·477	1·683
		Khandwa	...	35,840	35,840	33,584	34,688	638 2 5	641 1 5	12 2 6	11 13 2	3·648	3·548
		Total	...	251,080	251,280	156,650	2,45.122	2,545 9 10	2,539 2 4	.....	.....	...	...
						Average for the Division		...	.....	10 6 0	6 10 0	3·114	1·989
Betul	...	Bowergarh	...	38,720	38,720	28,054	37,162	616 0 0	787 14 6	14 0 10	13 9 1	4·216	4·071
		Khamapur	...	16,000	16,000	16,000	16,000	247 2 9	263 8 3	10 6 6	10 8 7	2·966	3·162
		Total	...	54,720	54,720	44,054	53,162	863 2 9	1,051 6 9	.....	.....	...	...
						Average for the Division		...	.....	12 8 7	12 10 6	3·762	3·797
Chanda	...	Bemaram	...	12,296	12,296	12,296	12,296	840 9 9	1,198 11 9	43 12 0	62 6 3	13·126	18·718
		Mirkulloo	...	8,479	8,479	8,479	8,159	801 10 8	1,419 6 4	60 8 1	111 5 5	18·153	33 402
		Taroba	...	25,619	25,619	25,509	25,619	1,188 4 0	1,138 7 3	29 13 0	28 7 0	8·944	8·532
		Goverdhun	...	13,931	13,931	13,931	13,931	669 13 5	617 11 2	30 12 4	28 6 0	9·232	8·513
		Total	..	60,325	60,325	60,215	60,005	3,500 5 10	4,374 4 6	.....	.....	...	...
						Average for the Division		...	.....	37 2 3	49 10 6	11·158	13·997

Appendix A.—(*Continued.*)

Division.	Forests.	Area in acres.				Cost of area actually protected.					
		Under protection.		Actually protected.		Total.		Per square mile.		Per acre.	
		1881-82.	1882-83.	1881-82.	1882-83.	1881-82.	1882-83.	1881-82	1882-83.	1881-82.	1882-83.
1st Class Reserves. —(Contd.)						Rs. a. p.	Rs. a p.	Rs. a. p.	Rs. a. p.		
Seoni ...	Korai ...	31,210	31,210	31,210	31,210	494 9 2	532 15 4	10 2 3	10 14 10	3·043	3·279
	Sakata ...	10,020	10,020	10,020	10,020	156 3 10	171 1 5	9 15 8	10 14 9	2·994	3·278
	East Pench ...	42,580	42,580	42,580	42,580	607 4 11	616 14 5	9 2 0	9 4 4	2·738	2·782
	Nagulwari ...	9,680	9,680	9,680	9,680	101 13 1	114 2 0	6 11 8	7 8 8	2·020	2·264
	Paraspani ...	8,240	8,240	8,240	8,240	86 5 4	97 7 11	6 11 3	7 9 2	2.012	2·272
	Narhar ...	39,040	39,040	3,7040	39,040	410 12 10	461 14 3	7 1 6	7 9 2	2·129	2·272
	Total ...	140,770	140,770	138,770	140,770	1,857 1 2	1,994 7 4	.....	...	...	...
				Average for the Division.			.....	8 9 0	9 1 0	2·569	2·720
Sangor ...	Garhakhota ...	2,899	2,899	2,894	2,899	20 5 0	10 0 0	4 7 11	2 3 4	1·349	0·662
	Hathkho ...	10,598	10,598	10,598	10,598	370 0 6	232 14 4	21 1 5	14 1 0	6·327	4·219
	Rangir ...	1,987	1,987	1,987	1,897	56 5 2	40 5 0	18 2 2	13 9 7	5 442	4·080
	Ranipura ...	2,720	2,720	2,720	2,720	38 0 0	79 12 8	8 15 0	18 12 4	2·682	5·632
	Tigora ...	...	459	...	459	... ..	2 8 0	.....	3 7 9	...	1·046
	Total ...	18,204	18,663	18,199	18,573	484 10 8	365 8 0	.....	...	...	...
				Average for the Division.		...	.....	17 0 8	12 9 5	5·113	3·778
	Total 1st Class Reserves.	867,614	868,273	739,712	853.982	13,622 7 6	14,714 7 8	11 4 3	11 0 5	3·380	3·308

Nimar ...	Bainpura ...	600	600	600	600	12 0 0	11 1 6	12 12 9	11 13 4	3·840	3·550
	Gunjari ...	3,500	3,500	3,500	3,500	20 1 6	45 15 11	3 10 9	8 6 6	1·102	2·523
	Undria Booria ...	3,100	3,100	3,092	3,100	18 0 0	34 12 8	3 11 6	7 2 11	1·117	2·155
	Bhojwa Beheria ...	2,000	2,000	2,000	2,000	31 9 1	41 4 0	10 1 7	13 3 2	3·030	3·960
	Ajnal ...	1,500	1,500	1,500	1,492	26 4 0	20 7 6	11 3 2	8 12 5	3·360	2·634
	Chooria ...	170	170	170	170	.....	.....	.....	.....	...	...
	Total ...	10,870	10,870	10,862	10,862	107 14 7	153 9 7	.....	.....	...	...
				Average for the Division. ...			.....	6 5 8	9 0 9	1·907	2·715
Saugor ...	Jalundhur ...	2,885	2,885	2,885	2,885	67 6 5	116 13 10	14 6 11	24 14 9	4·486	7·777
Balaghat ...	Pandratola ..	4,960	4,817	4,320	4,457	73 14 7	55 1 3	13 7 2	7 14 6	3·285	2·373
Wardha ..	Dhuga ...	14,171	14,171	13,184	6,171	478 1 10	531 12 9	11 15 1	19 2 2	3·834	5·742
	Erjhur ...	11,911	11,911	10,759	11,611						
	Total ...	26,082	26,082	23,943	17,782	478 1 10	531 12 9	.....	.....	...	...
				Average for the Division. .			.....	11 15 1	19 2 2	3·834	5·742
Total	2nd Class Reserves ...	44,797	44,654	42,016	35,986	727 5 5	857 5 5	11 1 3	15 3 11	3·324	4·574
Total of the 1st and	2nd Class Reserves ...	912,411	912,927	781,722	889,968	13,749 12 11	15,591 13 1	.....	.. ...	...	...
				Average for the Provinces. ...			.....	11 4 1	11 3 1	3·377	3·359

Appendix B.

Comparative Statement of Receipts and charges in the 1st and 2nd Class Reserved Forests for the years 1881-82 and 1882-83.

Divisions and Districts.	Range.		Receipts.	Charges. Executive, protective and other charges wholly debitable to particular forest.	Charges. Control and other charges not wholly debitable to any particular forest.	Charges. Total.	Surplus.	Deficit.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction ...	Direction ...	1881-82 ...	1,773	5,803	33,798	39,601	...	37,828	
		1882-83 ...	2,634	5,258	34,086	39,344	...	36,710	
Mandla Division ..	Bangar ...	1881-82 ...	20,333	16,656	2,647	19,303	1,530	...	
		1882-83 ...	27,256	15,011	2,439	17,450	9,806	...	
	Topla ...	1881-82 ...	368	699	1,324	2,023	...	1,655	
		1882-83 ...	1,672	426	1,220	1,646	26	...	
	Keolikapa ...	1881-82 ...	291	315	883	1,198	...	907	
		1882-83 ...	208	331	813	1,144	...	936	
	North Phen ...	1881-82 ...	168	334	883	1,217	...	1,049	
		1882-83 ...	341	341	813	1,154	...	813	
	South Phen ...	1881-82 ..	1,139	379	1,324	1,703	...	564	
		1882-83 ...	2,098	690	1,220	1,910	188	...	
	Motinala ...	1881-82 ...	63	383	442	823	...	762	
		1882 83 ...	172	364	406	770	...	598	
	Jagamandal ...	1881-82 ...	61	1,556	1,324	2,880	...	2,817	
		1882-83 ...	509	1,845	1,220	3,065	...	2,556	
	Chuharigogarh ...	1881-82 ...	760	386	441	827	...	67	
		1882-83 ...	84	384	407	791	...	707	
	Airi ...	1881-82 ...	11	214	441	655	...	644	
		1882-83 ...	25	206	406	612	...	587	
	Barala ...	1881-82 ...	585	1,277	882	2,159	...	1,574	
		1882-83 ...	273	1,294	812	2,107	...	1,834	
	Lower Gour ...	1881-82 ...	54	623	441	1,064	...	1,010	
		1882-83 ...	1,074	1,614	407	2,021	...	947	
	Bijeragogarh ...	1881-82 ...	351	1,817	1,323	3,140	...	2,789	
		1882-83 ...	552	1,915	1,220	3,135	...	2,583	
	Singarampur ...	1881-82 ...	1,350	1,164	1,323	2,487	...	1,137	
		1882-83 ..	582	1,371	1,220	2,591	...	2,009	
	Total ...	1881-82 ...	26,035	25,803	13,678	39,481	...	13,446	
		1882-83 ...	34,846	25,792	12,604	38,396	...	3,550	

Hoshangabad Division	Bori	1881-82	291	1 505	583	2,090	...	1,799
		1882-83	69	1,305	472	1,777	...	1,708
	Rajaborari	1881-82	16,736	3,088	2,536	5,624	14,112	...
		1882-83	15,829	2,286	2,056	4,342	11,487	...
	Saonligarh	1881-82	8,761	2,201	1,521	3,722	5,039	...
		1882-83	9,567	2,197	1,430	3,627	5,940	...
	Total	1881-82	25,788	6,794	4,642	11,436	14,352	...
		1882-83	25,465	5,788	3,958	9,746	15,719	...
Betul Division	Bowergarh	1881-82	4,940	1,870	1,036	2,906	2,034	...
		1882-83	8,017	2,148	1,228	3,376	4,641	...
	Khamapur	1881-82	5,710	2,217	1,289	3,506	2,204	...
		1882-83	5,837	2,291	1,278	3,569	2,268	...
	Total	1881-82	10,650	4,087	2,325	6,412	4,238	...
		1882-83	13,854	4,439	2,506	6,945	6,909	...
Nimar Division	Kaleebheet	1881-82	8,929	2,520	2,035	4,555	4,374	...
		1882-83	14,362	2,369	2,617	4,986	9,376	...
	Punassa	1881-82	5,200	5,826	2,048	7,874	...	2,674
		1882-83	5,301	5,185	2,214	7,399	...	2,098
	Chandgarh	1881-82	3,435	1,432	957	2,389	1,046	...
		1882-83	3,969	1,189	933	2,122	1,847	...
	Khandwa	1881-82	3,878	10,192	2,516	12,708	...	8,830
		1882-83	3,420	5,181	1,789	6,970	...	3,550
	Total	1881-82	21,444	19,970	7,556	27,526	..	6,084
		1882-83	27,052	13,924	7,553	21,477	5,575	...
Chanda Division	Ahiri	1881-82	2,67,027	1,09,026	7,013	1,16,039	150,988	...
		1882-83	22,907	29,718	2,995	32,713	...	9,806
	Mohurli	1881-82	26,439	9,232	1,472	10,704	15,735	...
		1882-83	26,770	9,182	1,915	11,097	15,673	...
	Total	1881 82	2,93,466	1,18,258	8,485	1,26,743	166,723	...
		1882-83	49,677	38,900	4,910	43,810	5,867	...

Divisions and Districts.	Range.		Receipts.	Charges. Executive, protective and other charges wholly debitable to particular forest.	Charges. Control and other charges not wholly debitable to any particular forest.	Charges. Total.	Surplus.	Deficit.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Seoni Division ...	Korai ...	1881-82 ...	7,642	3,211	1,251	4,452	3,190	...	
		1882-83 ...	5,988	3,208	1,308	4,516	1,472	...	
	Sonawani ...	1881-82 ...	6,775	1,850	893	2,743	4,032	...	
		1882-83 ...	6,702	1,877	1,012	2,889	3,813	...	
	West Pench ..	1881-82 ..	6,078	1,981	925	2,906	3,172	...	
		1882-83 ..	7,408	1,841	1,083	2,924	4,484	...	
	East Pench ...	1881-82 ...	6,247	2,281	1,267	3,548	2,699	...	
		1882-83 ..	4,889	2,364	1,373	3,737	1,152	...	
	Total ...	1881-82 ...	26,742	9,323	4,326	13,649	13,093	...	
		1882-83 ...	24,987	9,290	4,776	14,066	10,921	...	
Saugor Division ...	Garhakota ...	1881-82 ...	2,759	2,381	555	2,936	...	177	
		1882-83 ...	1,907	1,154	226	1,380	527	...	
	Tigora ...	1881-82 ...	405	126	71	197	208	...	
		1882-83 ...	421	125	168	293	128	...	
	Ranipura ...	1881-82 ..	1,185	858	79	937	248	...	
		1882-83 ...	1,220	948	95	1,043	177	...	
	Rungir ...	1881-82 ..	1,560	488	335	823	737	...	
		1882-83 ...	2,260	449	188	637	1,623	...	
	Hathkho ...	1881-82 ...	2,518	1,727	534	2,261	257	...	
		1882-83 ...	2,807	1,374	368	1,742	1,065	...	
	Total ...	1881-82 ...	8,427	5,580	1,574	7,154	1,273	...	
		1882-83 ...	8,615	4,050	1,045	5,095	3,520	...	
	Total 1st Class Reserves	1881-82 ...	4,14,325	1,95,618	76,384	2,72,002	1,42,321	...	
		1882-83 ...	1,87,130	1,07,441	71,438	1,78,879	8,251	...	

Nagpur District ...	Nagpur ...	1881-82 ...	28,712	8,460	6,593	15,053	13,659	...
		1882-83 ...	28,103	8,200	7,420	15,620	12,483	...
Bhandara District ...	Bhandara ...	1881-82 ...	44,860	6,994	5,786	12,780	32,080	...
		1882-83 ...	53,225	7,209	...	7,209	46,016	...
Wardha District ...	Wardha ...	1881-82 ...	28,885	10,851	5,556	16,407	12,478	...
		1882-83 ...	25,330	10,143	1,821	11,964	13,366	...
Chanda District ...	Chanda ...	1881-82 ...	84,089	12,804	6,753	19,557	64,532	...
		1882-83 ...	85,052	12,722	6,986	19,708	65,344	...
Balaghat District ...	Balaghat ...	1881-82 ...	36,486	9,018	...	9,018	27,468	...
		1882-83 ...	36,005	9,758	...	9,758	26,247	...
Jubbulpure District...	Jubbulpore ...	1881-82 ...	18,786	5,103	...	5,103	13,683	...
		1882-83 ...	19,487	5,088	...	5,088	14,399	...
Saugor District ...	Saugor ...	1881-82 ...	55,399	13,076	7,785	20,861	34,538	...
		1882-83 ...	60,975	13,989	6,144	20,133	40,842	...
Damoh District ...	Damoh ...	1881-82 ...	65,671	12,804	...	12,804	52,867	...
		1882-83 ...	62,486	13,678	...	13,678	48,808	...
Seoni District ...	Seoni ...	1881-82 ...	50,441	8,494	6,022	14,516	35,925	...
		1882-83 ...	48,852	9,036	6,877	15,913	32,939	...
Mandla District ...	Mandla ...	1881-82 ...	83,334	15,303	...	15,303	68,031	...
		1882-83 ...	91,245	15,781	...	15,781	75,464	...
Hoshangabad District.	Hoshangabad ...	1881-82 ...	51,315	11,200	9,400	20,600	30,715	...
		1882-83 ...	58,190	13,365	9,405	22,770	35,420	...
Nimar District ..	Nimar ...	1881-82 ...	42,555	11,225	10,655	21,880	20,675	...
		1882-83 ...	45,923	10,365	11,126	21,491	24,432	...
Betul District ...	Betul ...	1881-82 ...	35,981	6,668	5,783	12,451	23,530	...
		1882-83 ..	41,572	7,062	5,957	13,019	28,553	...
Narsinghpur District.	Narsinghpur ...	1881-82 ...	14,900	3,315	...	3,315	11,585	...
		1882-83 ...	14,699	3,712	...	3,712	10,987	...
Chhindwara District.	Chhindwara ...	1881-82 ..	29,360	7,878	...	7,878	21,482	...
		1882-83 ...	29,977	8,232	...	8,232	21,745	...
Raipur District ...	Raipur ...	1881-82 ...	57,833	7,640	809	8,449	49,384	...
		1882-83 ...	54,548	9,308	3,905	13,213	41,335	...
Bilaspur District ...	Bilaspur ...	1881-82 ...	20,276	3,301	809	4,110	16,166	...
		1882-83 ...	20,391	2,937	3,905	6,842	13,549	...
Sambalpur District...	Sambalpur ...	1881-82 ...	9,677	4,117	809	4,926	4,751	...
		1882-83 ...	14,457	5,333	3,905	9,238	5,219	...
Total	2nd Class Reserves ...	1881-82 ...	7,58,560	1,58,251	66,760	2,25,011	5,33,549	...
		1882-83 ...	7,90,517	1,65,918	67,451	2,33,369	5,57,148	...
	Grand Total ...	1881-82 ...	11,72,865	3,53,869	1,43,144	4,97,013	6,75,870	...
		1882-83 ...	9,77,647	2,73,359	1,38,889	4,12,248	5,65,399	...

REPORT

WITH THE CHIEF COMMISSIONER'S REVIEW

ON THE

Forest Administration

IN THE

CENTRAL PROVINCES,

FOR

THE YEAR 1883-84.

NAGPUR:

PRINTED AT THE CHIEF COMMISSIONER'S OFFICE PRESS.

1884.

No. 996 F., dated Calcutta, the 20th December 1884.

From—A. MACKENZIE, Esq., C.S., Secretary to the Government of India, Home Department.

To—The Chief Commissioner of the Central Provinces.

I AM directed to acknowledge the receipt of your Secretary's letter, No. 4626—218 of the 19th September last, submitting the Report on the Forest Administration in the Central Provinces for the year 1883-84, with your orders thereon.

Area and boundaries.

2. Fair progress has been made during the year in the transfer of second class reserves to the first class, amounting to 842 square miles, and in the demarcation and survey of their boundaries. The areas of the forests stood thus at the close of the year:—

	Square miles.
First Class Reserves	3,435
Second do. do.	15,994
Total	19,429
District forests	319
Grand Total	19,748

It appears that a further area of 644 square miles was examined during the year, with a view to be similarly transferred from second to first class reserves. No change has taken place during the year in the total area of the forests.

3. Of the boundaries of the first class reserves, 1,995 miles are reported as cleared, while 431 miles remain to be attended to. 277 miles of new boundaries in the first class reserves were demarcated and surveyed. In the second class reserves 1,852 miles were surveyed and 1,661 miles demarcated. These results are satisfactory; but I am to invite attention to the letter from this Department, No. 790 F. of the 24th October last, and to express a hope that in future the demarcation may extend to the boundaries of the cultivated blocks of land situated inside the reserves, which it may be considered necessary to maintain, and which are not removed outside by suitable alterations of the boundaries.

Establishments.

4. In paragraph 9 of your Review it is pointed out that the superior staff is not sufficient to provide an Officer for Chhattisgarh, and that you propose to draw the attention of the Government of India to the matter. With reference to this remark, I am to say that the Government of India will await a separate communication on the subject.

The excessive strength of the temporary subordinate staff, as compared with the permanent staff, has also attracted your attention, and you ascribe the large number of offences committed by the members of the subordinate staff chiefly to the fact that they are only temporary servants. The Government of India addressed you on this subject in the letter from this Department, No. 549 F., dated the 27th June 1882, and I am to suggest that it may receive your special consideration as soon as the demarcation and final settlement of the permanent forest estates has been sufficiently advanced to show what permanent staff is actually required for the efficient protection and management of the forests.

5. The new cases of breaches of forest rules compare as follows with those of the previous year :—

Breaches of Forest Rules.

Year.	Number of Cases		
	Taken into Court.	Compounded	Total number of new cases during the year.
1883-84	341	9,850	10,191
1882-83	635	8,921	9,556
Increase in 1883-84	...	929	635
Decrease " " "	294	...	...

The number of cases taken into Court is only about one-half of what it was in the year 1882-83, while the number of compounded cases has increased by 929, which appears to be due to the enforcement of additional restrictions in the Sambalpur District. Without these, the number of cases would have been considerably less than in the previous year.

6. The results of protection against fire during the year under review were as follow :—

Protection against fire.

Year.	Area in square miles.				Cost per square mile of area actually protected, in Rupees.
	Attempted.	Failures.	Actually protected.	Proportion of failures to area attempted.	
1883-84 ...	1,429	63	1,366	4	13
1882-83 ...	1,426	36	1,390	3	11

The small addition to the area attempted is due to the protection of additional areas in the Gour Reserve. The results of protection are not quite as favourable as they were in 1882-83, which is said to be due to the lighting of a series of fires by dacoits in the Chandgarh Reserve.

Only 7 per cent. of the total area of reserves has been protected, but efforts are being made to protect, in addition, extensive areas of second class reserves without the clearing of fire lines. This measure will be useful as an auxiliary to regular fire-protection.

7. With a few exceptions the areas protected against fire are also closed to grazing, the rest of the forests being open. The following number of cattle grazed in the forests :—

Grazing.

Year.	In 1st Class Reserves.	In 2nd Class Reserves.	Total.
1883-84	165,251	3,014,640	3,179,891
1882-83	166,797	2,035,456	2,202,253

The cattle grazing in the first class reserves was almost the same in the past two years, but in the second class reserves an increase of 48 per cent. has been recorded. This is said to be due to more complete registration, but the returns are said to be still far from complete. The above data show that an area of 4 acres is available for each head of cattle of all sorts. About three-fourths of the cattle are cows and bullocks, 10 per cent. are buffaloes, and the rest principally sheep and goats.

Rate of growth of Sâl.

8. His Excellency the Governor General in Council has noticed the record of measurements, given in paragraph 128 of the Report, which were made with the view of ascertaining the rate of growth of Sâl. I am to express a hope that these measurements will be steadily continued, and that a detailed record of the results will be kept, as they are likely to be of great value, if accurately made, in ascertaining the annual yield of Sâl forests.

Yield of the Forests.

9. As suggested in paragraph 9 of the orders* by the Government of India on the Report for 1882-83, an attempt has now been made to give the yield of the forests in a uniform measure, for which the ton has been chosen. The following statement shows the result :—

* No. 206F., dated 2nd April 1884.

Description of Produce.	Quantity removed in tons.		
	By Departmental Agency.	By Purchasers.	Total.
Teak and Sâl Timber	2,023	1,613	3,636
Other Timber	1,020	41,024	42,044
Fencing Wood	.....	4,895	4,895
Firewood and Charcoal	650	113,762	114,412
Bamboos	443	15,293	15,736
Grass	242	15,560	15,802
Other minor Produce	260	9,647	9,907
Grand Total ...	4,638	201,794	206,432

The statement is admittedly incomplete, but efforts should be made to render it by degrees more accurate. The produce removed by direct Government agency amounts to only about 2 per cent. of the total quantity removed, and it is expected that even this small quantity will be still further reduced.

10. The outturn is divided as follows amongst the first and second class reserves :—

Class of Forest.	Quantity in Tons.					
	Total.*			Per Square Mile.*		
	Timber, fuel, and bamboos.	Other produce.	Total.	Timber, fuel, and bamboos.	Other produce.	Total.
First Class Reserves	25,503	7,887	33,390	10	3	13
Second ditto ...	155,220	17,822	173,042	9	1	10
Total ...	180,723	25,709	206,432	9	1	10

* Calculated on the areas as they stood at the commencement of the year.

This table, even if it is only approximately correct, shows that the first class reserves yield already more produce than the second class reserves, and this difference may be expected to increase considerably, as the effects of better protection become more apparent. It will be of the greatest interest to watch the further progress of this subject.

Financial results.

11. The financial results were as follow :—

Class of Forests.	Receipts.	Charges.	Surplus.	
			Total.	Per square mile.
	Rs.	Rs.	Rs.	Rs.
1st Class Reserves	1,79,788	174,612*	5,176	2
2nd ditto	8,14,981	2,61,445*	5,53,536	33
Total in 1883-84 ...	9,94,769	4,36,057	5,58,712	29
Total in 1882-83 ...	9,77,647	4,12,248	5,65,399	2
Increase in 1883-84	17,122	23,809	...	...
Decrease in 1883-84	...	...	6,687	...

* According to the data given in Form No. 57.

The results of 1883-84 are slightly less favourable than those of the previous year, notwithstanding the increased Receipts. This seems to be due to the unprofitable nature of the departmental working in the Mandla Division, where certain sums were spent on timber works, without adequate returns accruing within the financial year. The net Surplus derived from the first class reserves has fallen off for the same reason.

General.

12. On the whole, the progress made during the year is satisfactory, and His Excellency the Governor General in Council is pleased to endorse the commendation bestowed by you upon the Officiating Conservator of Forests. The Report gives a full account of the work, but it is much overcrowded with unnecessary details, and it might usefully have been reduced to one-half of the space which it occupies.

R. B.—Home Department Press.—No. 37—26-12-84.—240.

No. $\frac{4411}{209}$

FROM

LINDSAY NEILL, ESQUIRE, C. S.,

SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

To

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpur, 6th September 1884.

SIR,

I am directed to acknowledge your letter No B-69, dated 18th August, submitting the Forest Administration Report for the year 1883-84, together with the prescribed Annual Statements.

2. The changes made during the year in the area under the management of the Department were as follow:—

Area of forests.

Class of Forest.	Area in square miles.		
	At the beginning of the year.	Added or excluded.	At the end of the year.
First Class Reserves	2,593	+842	3,435
Second do.	16,837	—843	15,994
Total Reserves ...	19,430	— 1	19,429
Unreserved Forests ...	318	+ 1	319
Total ...	19,748	.....	19,748

The 842 square miles of forest added to the reserves of the 1st Class are made up of 793 square miles in Nimar, 41 in Wardha and 8 in Jubbulpore, which have been transferred from 2nd Class Reserves.

The 2nd Class Reserves are diminished by a little more than 842 square miles, owing to clearance leases granted for 503 acres in the Saugor district; but a rectification of district totals gave an addition of 27 acres.

The unreserved or district forests gained over 1,000 acres by the resumption of 2 clearance leases in the Chhindwara district.

3. From the account you give in paragraph 9 of the transfer of 793 square miles to the Nimar 1st Class Reserves, it will be apparent to the Government of India that though of late years transfers from the 2nd to the 1st Class were insignificant, the importance of selecting the more valuable parts of the 2nd Class Reserves and treating them as 1st Class was not overlooked. The difficulties experienced in Nimar lay in adjusting and fixing the boundaries not only in their demarcation, and a work begun in 1879 was only completed in 1883. Even now (*vide* Annual Form 49) the areas transferred in Nimar are only approximate, and some corrections may be needed.

Transfer from one class of reserve to another.

Inspection of Second Class Reserves with a view to their transfer to First Class.

4. During the year under review an area of 644 square miles of 2nd Class Reserves was examined, and inspection reports and maps of the forest submitted by Divisional Forest Officers with the view to their transfer to 1st Class Reserves. Details regarding these proposed additions are given in paragraphs 11 to 16, and the transfer of the Bhanduk forest has been sanctioned since the close of the year.

If after examination of the reports and proposals of the Divisional Forest Officers you are able to support their recommendations, there will be for the town and district of Jubbulpore, within easy and accessible distance a forest with good timber of a mixed kind, and the consolidation of certain 2nd Class Reserves of Saugor, Damoh and Narsinghpur will afford a permanent supply of timber to Saugor, Narsinghpur, and the more open parts of the higher Nerbudda Valley. The other proposals appear to have for their object the improvement of the forests and their being placed under more scientific management rather than the immediate provision of 1st Class Reserves for centres of consumption.

Work connected with boundaries.

5. Work in connection with boundaries appears to have been vigorously prosecuted. The boundaries of all 1st Class Reserves were inspected and the boundary lines cleared of all after-growth and jungle and boundary marks were repaired and brought into proper condition.

The total length of boundary of 1st Class Reserves (inclusive of the areas newly transferred) is 2,425 miles, of which 1,994 miles were cleared and 904 masonry pillars and 8,481 other marks were put into proper repair at a cost of Rs. 3,354. The table at page 7 gives a very clear account of the length of boundaries in each 1st Class Reserve, the portions cleared in miles, and the portions remaining uncleared, the total number of boundary marks, &c.

The total number of boundary marks appears to be 11,760, of which 1,070 are masonry pillars, and 10,690 other marks. The number of masonry pillars in good repair at the close of the year was 904, and of other marks 8,481, while 75 masonry pillars and 793 other marks were said to be in a bad condition.

Survey and demarcation of boundaries.

6. The total work completed in the 1st and 2nd Class Reserves was

new boundaries surveyed	...	2,130 miles.
" " demarcated	..	1,937 "

In the 1st Class Reserves 277 miles were surveyed and demarcated in the Mandla, Nimar and Chanda divisions. In the 2nd Class Reserves work was carried on in 12 districts and 1,853 miles of boundary were surveyed, and 1,660 miles demarcated.

The details of this work are given in paragraphs 17—61 of your report. Speaking generally, it may be said that progress in the 2nd Class Reserves has been slow, because no fixed system of procedure was prescribed. Disputes frequently arose which could not be settled by an examination of the village Settlement map or by a reference to natural or recognised boundaries. In the beginning of the present year Mr. Jones laid down the rule that the boundaries should be laid down by a Revenue officer, and that they should then be surveyed and demarcated by the Forest officer. The principle was asserted that the *area* should be the ultimate test, and the line drawn on the village maps be regarded as an indication of the general line of demarcation between village land and forest land. As the area which the Settlement officer intended that the village should retain is accurately known, the final test is whether the area reserved to Government is equal to the amount which it was intended to reserve, and whether the line of demarcation corresponds fairly with that laid down in the village map.

Providing himself with the Revenue Survey and village maps, and knowing the area for which Settlement was made and the remaining reserved area, the demarcation officer was instructed to

(1), accept any trustworthy marks and the line in accordance with them;

(2), accept any boundary mutually recognized by the Forest Department and the people;

provided always that special enquiries should be set on foot if action under either (1) or (2) rendered the areas which should respectively belong to Government and to the people materially wrong.

In cases of difficulty and dispute a reference was to be made to the District officer.

7. The remarks in paragraphs 25, 26, and 58—61 relating to the three districts of the Chhattisgarh Division, in paragraph 43 relating to Wardha, and in paragraph 57 relating to Chhindwara, merit attention. With regard to forests in the Chhattisgarh Division it seems desirable that the demarcation of forest boundaries should be simultaneously effected with the Revenue Survey or Settlement. In the Wardha district the Chief Commissioner has arranged to afford some relief to the Deputy Commissioner by attaching a third Assistant to the district, and this will probably enable the Deputy Commissioner to pay greater attention and time to forest demarcation. To Chhindwara a Forest officer has lately been posted who will assist the Deputy Commissioner in the work. The matter seems to require attention in several districts, and the Chief Commissioner will ask Commissioners to look into it.

Working plans &c.

8. In paragraph 4 of the Government of India orders on the Forest Report for 1882-83 the absence of information regarding surveys and working plans was noticed. These questions are dealt with in Chapter II of your report. Surveys, it appears, are confined to forest boundaries, working plans are not framed but annual plans of operations are submitted to you and sanctioned.

In paragraph 64 you refer to the plan by which sal is felled and extracted from the Baujar valley forest. It appears that sal is cut, sawn and removed by Departmental agency, and that it was found impossible during the year, owing to paucity of sawyers, to cut the number of sal trees which the forests were able to give. In paragraph 65 you refer to a proposal you are about to submit whereby the Forest Department should be relieved of dealing in timber and leave its distribution and sale to private agency.

The Chief Commissioner will be glad to consider any proposal of the kind which you may submit.

It appears to him that when private agency and enterprise are forthcoming, which is not always the case, it will be desirable and economical to put a stop to departmental action. Timber is used for numerous purposes and the need and want of consumers influence and determine the price. Government has few means of knowing the wants of consumers and oscillations in demand, whereas a timber dealer makes it his business to ascertain and meet them. A timber dealer has also depots where he can keep his timber and fashion it to the wants of customers till favorable opportunities for sale present themselves, whereas when Government has once felled trees and converted them into shapes it has to sell them for what they will fetch or run the risk of loss by theft and fraud.

The true duties of Government in respect to forests appear to be to preserve them for climatic reasons and to maintain their productiveness at the highest point in order to provide the community with a continued and steady supply of timber. The distribution and retail sale of timber are beyond the proper functions of Government and appertain to private enterprise which is better able to appreciate and meet the wants of customers. By the substitution of private agency for departmental action Government seems likely to benefit in two ways, one by restricting its officers to their real functions, which are already sufficiently exacting, the other in getting higher prices for its produce when private enterprize engenders competition.

Forest Establishment.

9. The matter of Forest establishment is treated in Part I of Chapter III. The superior establishment which the Government of India is able to assign for service in the Central Provinces must of course be regulated by general considertions and the strength of the Forest Department as a whole. As pointed out by Dr. Schlich in paragraph 41 of his valuable "suggestions," the present forest staff was appointed without reference to the needs of the Chhattisgarh Division, and the necessity of adding a Deputy Conservator to the staff has been recognized. The attention of the Government of India will again be

drawn to the matter. The Raipur forests are coming under the influence of roads and railways and can no longer be neglected without risk of serious injury to their value.

With regard to the appointment of Forest Rangers and Foresters, I am to say that the Chief Commissioner hopes you will arrange shortly for recruiting for service in the Department qualified young men who after a year's work in the forests will be sent to the Forest School, Dehra, for instruction.

The Statements attached to paragraphs 69 and 70 show the strength and distribution of the superior and the subordinate executive and protective sanctioned establishment, the areas in square miles of the reserves and the average area supervised per officer and men of each grade. It is understood that the difference between "permanent" and "temporary" establishment is chiefly that the former are sanctioned by the Government of India and the latter by this Administration. In the case of the latter, service does not qualify for pension and consequently the men belonging to it are of inferior character.

The facts mentioned in paragraph 75 of your report show that most of the offences committed by servants of the department are committed by men on the temporary establishment, which should be kept as low as possible, and limited to the number of men required for work which is really temporary and fluctuating in its demands for labour.

10. It is satisfactory to note that by degrees larger areas of the 2nd Class Reserves are being closed to felling. From the table in paragraph 74 it appears that in the case of six districts the area so protected is considerable. In Damoh and Sambalpur it will probably be found necessary to treat larger areas similarly. The matter should receive your earnest attention as the longer such measures are deferred the greater will be the inconvenience caused to the people in the future.

11. In the review of last year's report (paragraph 11) Mr. Jones desired to have some brief notice of cases in which there has been misconduct on the part of the subordinates of the department. Paragraphs 76 to 84 of this year's report meet this requirement.

If the 168 permanent forest guards and the 1,604 daffadars, moharirs and chaprasis drawing less than Rs. 15 per mensem (referred to in paragraph 68) be taken as those most likely to be offenders, we find that they committed in all 255 offences. This number in itself appears large, but it is explained that only in six cases were the offences of a nature requiring to be dealt with Magistrates.

The six cases were:—

2 misappropriation,	Section	403,	Indian Penal Code.
1 theft*	"	379,	"
1 cheating	"	417,	"
1 accepting a bribe	"	163,	"
1 omitting to give information of an offence, &c.	"	176,	"

The theft case broke down in the Magistrate's Court, and the omission to give notice to a public servant of an offence collapsed in the Sessions Court, so that in all only 4 members of the Forest establishment were judicially punished. The departmental offences appear to have been of a trivial nature, being mostly simple neglects of duty, disobedience of orders, absence without leave, and the like. The departmental punishments awarded are shown in a tabular Statement at page 26, and in 165 cases offenders were fined,

21	"	"	suspended,
13	"	"	reduced in grade,
52	"	"	dismissed.

The Chief Commissioner thinks it would be well for you to exercise some control over departmental punishments. In cases of reduction and dismissal

* 2 persons.

subordinates probably appeal to you if dissatisfied with the orders passed, but in cases of fine they may think it better to remain silent.

It is observed that out of the 165 offenders fined, no less than 60 were fined in Nimar, while 32 of the total dismissals were also ordered in that district. These figures are very large. The Chief Commissioner desires to know whether the cases of the officers thus punished were properly enquired into and the orders of Government on the subject duly observed. Frequent dismissals are not a sign of good administration.

12. The Chief Commissioner is concerned to read the account of the very serious case of fraud by a Head Constable in the Chanda district, given in paragraph 83, and will be obliged by your submitting the records in the case, which as it concerns the loss of a large sum of public money ought to have been reported long ago. Reading the facts related by you it is not understood why an enquiry by the Deputy Conservator of Forests was made. The case being one in which a Head Constable misappropriated over Rs. 1,000 of forest collections and committed suicide rather than face an enquiry, was clearly one for investigation by the District Magistrate.

The case of the loss of forest collections in Betul, referred to in paragraph 84, has already been before the Chief Commissioner. It was a clear case of theft from the Station-house.

The Inspector General of Police has recently been charged to examine and report upon all the duties which the Police perform in respect to forest collections. Mr. Crosthwaite does not of course object to their escorting collections from Police posts to the Treasury, but he thinks it wrong and objectionable that they should be direct receivers or collectors of forest dues.

13. The breaches of the forest rules brought to notice during the year were as follow:—

Class of Reserve.	Number of cases.		
	Taken into Court.	Compounded.	Total.
First Class Reserves ...	10	450	460
Second „ „ ...	333	9,403	9,736
Total in 1883-84 ...	343	9,853	10,196
„ „ 1882-83 ...	636	9,092	9,728
Increase in 1883-84 ...	...	761	468
Decrease „ „ ...	—293	...	...

Of offences prosecuted there were 293 less than in the preceding year, and of compoundable offences there were 761 more.

The total number of offences prosecuted during the year in both classes of reserves was 343, involving 908 persons, in which convictions were obtained in 282 cases affecting 673 persons.

The percentage of convictions to prosecutions were 82·2.

The total number of offences *actually* compounded was 9,110, in which 16,328 persons were implicated against 8,921 cases and 17,671 persons in 1882-83. The differences are 189 cases more and 1,343 persons less than in 1882-83.

In paragraph 91 you refer to the case of a person who, representing himself as a contractor, got some Gonds to deliver lac to him. The offence appears to have been one of cheating rather than a special forest offence. In the same paragraph you write of an offender in the Betul district who "detected in maliciously setting fire to the forest was on conviction fined Rs. 5 by the Magistrate," and of another similar case in which two of the offenders were imprisoned for five

months each, and four with fines of one rupee each. Such sentences seem inadequate. The Chief Commissioner will call for the records of these cases.

Fire protection.

14. An additional area measuring 5,026 acres has been shown in the returns of forest that are successfully protected but which hitherto had been excluded from the printed statement; on the other hand the small Kantra nala reserves for which no supervising establishment is provided has been excluded from the area under systematic protection. The exclusion of this area leaves a net increase to forests to be protected of 1,476 acres.

The total area of the two classes of reserves under protection during the dry season of 1883 was,—

1st Class reserves	...	868,273 acres.
2nd do.	...	44,654 „
Total	...	912,927 acres.

Owing to the several transfers in the Nimar and Wardha districts to 1st Class reserves, the relative areas of the two classes of reserves altered. They stood for the dry season of 1884 as follows :—

1st Class reserves	...	906,701 acres.
2nd do.	...	7,702 „
Total	...	914,403 acres.

The area successfully protected in 1883-84 is 874,408 acres against 889,968 in 1882-83. The year's work was therefore less successful than that of 1882-83, but from a consideration of the remarks in paragraph 97 and the statement at figure 74 it is gathered that the results of 1883-84 were in most cases very satisfactory There was only one serious fire, and it occurred in the Chandgarh reserve of Nimar and burnt over 32,000 acres. Some papers relating to this fire have lately come before the Chief Commissioner, and it is quite possible that the fire or rather fires were lighted by dacoits out of revenge or to cover their retreat.

The Chandgarh reserve has long been known as an asylum for marauders and dacoits who carry on their depredations in the Native States of Central India and in British Territory. The Deputy Commissioner of Nimar has however quite lately reported the capture of several noted members of the gang which will perhaps be dispersed.

The Chief Commissioner has read with satisfaction your description of the good work done by the Deputy Commissioners of Damoh, Narsinghpur, Chhindwara and Saugor, and by the Forest Officer of Saugor in keeping fires out of large areas of the 2nd class reserves without any special cost to the Forest Department. He inclines to agree with you in thinking that the success of these officers indicates that protection can be given to forests in other districts in a similar manner. Before issuing any instructions on the subject, Mr. Crosthwaite would like to see a copy of the orders said to have been issued by the Deputy Commissioner of Damoh; and he looks with much interest for the scheme which the Forest Officer of Saugor is drawing up for the protection of 2nd class reserves.

Grazing of cattle, &c.

15. Grazing is, as a rule, prohibited in all forests protected from fire and in some of the 2nd class reserves.

The information is not complete regarding the exact number of cattle that graze in the reserves. The income from grazing fees rose from Rs. 3,78,512 in 1882-83 to Rs 3,87,950 in 1883-84, and of this latter sum the 1st class reserves contributed Rs. 25,747 and the 2nd class reserves Rs. 3,62,203.

In the Government of India orders on the Forest Administration Report of last year surprise was expressed that so many cattle graze in the Government forests seeing that there is so much private waste land in the Provinces.

Three reasons for this circumstance may be assigned : (1) that the Government forests are so very accessible to the people, and in some cases, in Mandla for example, offer a pasturage which is not easily equalled elsewhere; (2) that the

grazing fees are pitched at so moderate a rate that people readily pay them in preference to going further off into Zamindari forests; (3) that single malguzari estates as a rule are not of a sufficient extent to afford grazing to all the village cattle. The figures given in your 105th paragraph show there is great disproportion between the number of cattle grazed and the revenue received in different forests. Nimar, for example, collects more on 120,782 head than Hoshangabad receives for nearly three hundred thousand. There are probably good reasons for these differences. It is also possible that they may be due to differences of system only. Your attention is called to the matter which requires to be examined.

Natural reproduction.

16. Operations with the view to helping natural reproduction were principally undertaken in Mandla, Hoshangabad, Betul and Wardha. As far as it is possible for the Chief Commissioner to judge, reproduction has been progressing in a satisfactory manner in all forests protected from fire. On the other hand, the injury done by fire to living forests is vividly described in your remarks regarding the Nimar Punassa reserve, where you found clumps of teak poles "literally charred from top to base" by the fire of May 1882.

Artificial reproduction.

Planting and sowing in order to provide shade at camping places, and timber depots, and to create belts of evergreen trees along the boundaries of forests or along selected lines which are kept clear for the purpose of keeping fire out of the forest, and the sowing of seeds of forest trees in blanks along the boundaries of the reserves were undertaken in Mandla, Hoshangabad, Betul, Nimar, Saugor, Chanda and Damoh. It is gathered that only a moderate amount of success attended these operations. It is observed that no attempt to engage the tribes of Gonds and Baigas that live in or on the borders of our forests in the work of sowing and planting teak seems to have been made. You are aware of what has been done in this direction in Burmah, and of the success which has attended the Toung-ya plantations in Burmah forests.

Cutting creepers.

17. In the matter of cutting creepers good progress was made in the Mandla, Hoshangabad, Betul and Seoni Divisions. In the Divisions from which details have been furnished, the following general results of work are epitomized. 453,775 climbers were destroyed at a cost of Rs. 376. Climbers from the Jagmundal forest in the Mandla division have been cleared from over an area of 3 square miles. In Hoshangabad 17 square miles of forest in the Bori reserve were cleared and nearly 20 square miles in the Bowergarh and Khamapur reserves of Betul. There has thus been considerable advance in this work.

Yield and working of the forests.

18. The next Chapter of your report which the Chief Commissioner will notice is Chapter IV, dealing with the yield and working of the Forests.

The main point seems to be that almost twice as much work was done as in the previous year. The following statement in which the present year's figures and those for 1882-83 reduced to express the yield in one denomination, viz., tons,* affords a comparison of the work of the 2 years.

* See Government of India orders on last year's report.

Description of produce.	1882-83.				1883-84.			
	Cubic feet.	Maunds.	Number.	Reduced to Tons.	Cubic feet.	Maunds.	Number.	Reduced to Tons.
Teak wood	19,596	...	...	391 92	82,672	...	...	1653·44
Sal wood	18,045	...	...	360 90	18,468	...	...	369 36
Woods other than teak and sal ...	41,804	...	...	836 08	51,017	...	...	1020·34
Firewood and charcoal	...	4,919	...	175·68	...	18,213	...	650·46
Bambus	...	...	206,350	294 79	...	...	3,09,928	442·75
Grass pullahs	...	...	905,800	215 64	...	...	10,16,643	242 07
Other minor produce and farm crops ...	...	4,516	...	161 29	...	7,229	...	258·18
Hides and Horns	...	13	...	0·46	...	51	...	2·00
			Total...	2436·76			Total ...	4638 60

The number of trees felled is also greater, the figures being
11,509 trees in 1882-83, and
43,992 „ „ 1883-84.

The total receipts and charges under this head were—

Receipts	...	Rs. 80,334
Charges	...	„ 52,968
Net results	...	„ 27,366

19. No change was made it appears during the year in the several methods by which produce is paid for and removed from the Government forests.

Produce removed by purchasers.

The prevailing systems are the commutation and license systems, existing either separately or more often side by side. The characteristics of the two systems are clearly and concisely described by you in paragraph 172. Owing to the commutation system allowing for a fixed payment the removal of an indefinite quantity of produce, information regarding the quantity and description of produce removed is incomplete. You give, however, at page 69 a summary of produce removed from 1st and 2nd class reserves exhibiting the total quantities in tons. The abstract of this summary is;

		Tons
Removed from 1st Class reserves	...	29190·59
„ „ 2nd „	...	172,603·42
Total	...	201,794·01

20. The revenue of the year was Rs. 9,94,769 and the expenditure Rs. 4,36,057, leaving a surplus of Rs. 5,58,712.

The revenue of the year has exceeded that of the previous year by Rs. 17,122, but on account of increased expenditure the profits are less by Rs. 6,687. This increase of expenditure is due to the largely increased work done by departmental agency, to increased salaries consequent on promotions, to the greater outlay on survey and demarcation of forest boundaries, to more work in clearing boundaries and in the maintenance and repairs of boundary pillars and marks in the 1st class reserves and to the operations carried out for their improvement.

The receipts and charges classified under the three main heads prescribed by the Government of India are—

Particulars.		Receipts.	Charges.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
I. Departmental agency ...	1882-83	75,062	53,711	21,351	...
	1883-84	80,334	59,130	21,204	...
II. Other revenues ...	1882-83	9,02,585	2,21,262	6,81,322	...
	1883-84	9,14,435	2,33,413	6,81,022	...
III. Formation, protection and improvement ...	1882-83	...	1,37,275	...	1,37,275
	1883-84	...	1,43,572	...	1,43,572
Total ...	1882-83	9,77,647	4,12,248	5,65,399	...
	1883-84	9,94,769	4,36,057	5,58,712	...

The profits of the department are derived entirely from the 2nd class reserves, the working of the 1st class reserves resulting in a deficit of Rs. 10,574. It is probable that the income of the 1st class reserves will do little more than cover the expenditure for some years to come. The importance therefore of so working the 2nd class reserves as to keep up the permanent character of the supply is very great, both to the Government and the people of these Provinces.

The attention of the department should therefore, it appears to the Chief Commissioner, be directed closely to the 2nd class reserves. The points which demand immediate attention are the demarcation of boundaries; and the reform of the system under which produce is sold and removed The demarcation work is progressing but slowly, and Mr. Crosthwaite is not satisfied that the arrangements are in all cases as good as could be wished. He would be glad if you would in concert with the Deputy Commissioners of Districts consider the case of each district separately, and make such proposals through the Commissioners of Division as may appear best for hastening the completion of the work.

Regarding the system of management, much may be hoped, as experience in Mandla and elsewhere has shown, from an intelligent consideration of the circumstances of each forest, and a skilful adaptation of means to the end in view, namely, the supply of the wants of the people, at a fair charge, with the least possible delay and trouble, and with the greatest possible protection to the forests. The commutation system, which is radically bad, still extensively prevails, and it may not be possible for some time to come to get rid of it altogether. The circumstances of the forests vary very much, and require different treatment. It is, however, in the Chief Commissioner's opinion, quite possible to restrict the vicious system of commutation to the least valuable areas, and to replace it in many cases and to a large extent by a method of management which will benefit the forests and the revenue. It would be a great advantage if you would apply your large practical knowledge of Forest administration to this matter, taking up the question district by district, or if necessary forest by forest, and advising the Civil officers as to the best method to adopt in each case.

21. The Chief Commissioner's remarks have run to somewhat greater length than he intended, but the length and completeness of your report has led him to follow its sequence and notice all the more salient figures and facts recorded by you.

The preparation of the report must have entailed great labour, and the Chief Commissioner is gratified that you have been able to submit it with so near an approach to punctuality. It will reach the Government of India only a few days after the prescribed date.

To the officers of the Forest Department named in paragraphs 207—211, and to yourself, the Chief Commissioner desires me to convey his acknowledgments for the work done during the year. Coincident with a fair increase in revenue, there has been considerably more activity in departmental operations; and the survey, demarcation, and general improvement of the forests, have made good progress.

I have the honor to be,

Sir,

Your most obedient Servant,

LINDSAY NEILL,

Secretary.

No. B-69 of 1884-85.

FROM

R. H. E. THOMPSON, ESQUIRE,

OFFG. CONSERVATOR OF FORESTS,

Central Provinces,

To

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces,

Dated Nagpur, the 18th August 1884.

SIR,

I have the honor herewith to submit the Report on Forest administration for the year 1883 84, together with the prescribed Annual Statements &c.

I have the honor to be,

Sir,

Your most obedient Servant,

R. H. E. THOMPSON,

Offg. Conservator of Forests,

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PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

CENTRAL PROVINCES

FOR THE YEAR 1883-84.

BY R. H. E. THOMPSON, Esquire,

Offg. Conservator of Forests, C. P.

CHAPTER I.

Area and Boundaries.

General.

The addition of 539,037 acres (equal to 842 square miles and 157 acres) to the first class reserves; and the examination of 412,380 acres (equal to 644 square miles and 220 acres) of new area in the second class reserves, with the view to transfer to 1st class, comprise the progress made.

2. In addition to the above, the following work was done, and progress therefore made in permanently maintaining the boundaries of 1st class reserves:

1,994 miles of boundary lines were cleared, and 904 masonry and 8,481 other boundary marks were inspected and put into thorough repair.

3. The progress made in the survey and demarcation of new forest boundaries was as follows :—

In the 1st class reserves, the survey and demarcation of 277 miles and 38 chains of new boundary was accomplished in the Mandla, Nimar, and Chanda divisions.

In the 2nd class reserves, there was completed, in 12 districts, up to 31st March 1884 :—

Boundaries surveyed	...	...	1,853 miles.
Boundaries demarcated	...	...	1,660 „

The total work completed under this head in 1st and 2nd class reserves, was :—

New boundaries surveyed ...		...	2,130 miles.
New boundaries demarcated		...	1,937 „

Area.

4. The total acreage of Government forests, with which the Forest department has had to deal, stood on 1st April 1884, as follows :—

1st class reserves	...	...	2,198,272
2nd class reserves	...	...	10,236,201
Unreserved forests	...	...	204,436
	Total acres	...	12,638,909

5. The figures in the following statement show the areas of the different classes of forests as they stood on 1st April 1883, and on the corresponding date of this year :—

Forests.	On 1st April 1883.	Added during 1883-84.	Excluded during 1883-84.	Remaining on 1st April 1884.	Remarks.
1st class reserves...	1,659,235	539,037	...	2,198,272	* Addition by rectification of errors in district totals.
2nd class reserves...	10,775,714	*27	539,540	10,236,201	
Unreserved forests	203,348	1,088	...	204,436	
Total ...	12,638,297	540,152	539,540	12,638,909	

6. The following transfers appear as made in the year :—

From 2nd to 1st Class Reserves.

The area of 1st class reserves has been increased by 539,037 acres, thus :—

(1.) By 507,643 acres transferred in the Nimar division, as per letter No. 2710-118, dated 6th June 1884, from Secretary to the Chief Commissioner, Central Provinces.

(2.) By 26,082 acres, being the area of the Dhuga and Erjher reserves hitherto shown as 2nd class, but now transferred to the 1st class reserves in the Wardha division, as per Secretary to Chief Commissioner's letter No. 4946-265, dated 15th November 1883.

(3.) By 5,312 acres, being the area of the Bijpura forest, block No. 66, transferred in the Jubbulpore district, as per Secretary to Chief Commissioner's letter No. 2737-151, dated 27th June 1883.

7. The area of 2nd class reserves has been diminished :—

By 539,037 acres transferred to 1st class reserves as per details shown above.

By 503 acres leased out in two lots in the Saugor district, on clearance leases for a term of 10 and 7 years respectively, as per Secretary to the Chief Commissioner's letters Nos. 1967-102 of 4th March 1883, and 1991-102 of 5th May 1883.

8. The area of unreserved forests was increased by 1,088 acres by resumption of two clearance leases in the Chhindwara district.

8. Detailed information regarding the forest areas transferred to the first class reserves during the year, will be seen from the statement which is given herein below:—

Division or District.	Forest transferred from 2nd to 1st class.	Area. Acres.	Area. Total per division.	Authority for such transfers.
Jubbulpore ..	Bijpura ..	5,312	5,312	Secretary to the Chief Commissioner's letter No. 2737-151 of 27th June 1883.
Wardha ...	Erjhur ..	11,911	26,082	Secretary to the Chief Commissioner's letter No. 4946-265 of 15th November 1883.
	Dhuga ..	14,171		
Nimar ..	Undria Booria ..	3,100	507,643	Secretary to the Chief Commissioner's letter No. 2710-118, dated 6th June 1884.
	Bhojwa ...	720		
	Beheria ..	1,280		
	Ajnal ..	1,500		
	Bainpura ..	600		
	Chaoria ..	170		
	Gunjari ...	3,500		
	Susarda ...	853		
	Kanapur ..	7,680		
	Baidya ..	6,080		
	Dehgaon ..	1,000		
	Ielia ...	360		
	Borari ...	1,760		
	Dehri ...	1,400		
	Kharda ...	660		
	Andhali ...	1,280		
	Singaji ...	14,880		
	Dohad Purni ...	5,120		
	Gondwana ..	138,400		
	Mandwa ...	48,800		
	Amba ..	109,440		
	Shamurdeo ...	70,080		
	Jambupani ..	74,080		
	Ichhadevi ...	15,200		

9. The history of the recent transfers from 2nd to 1st class reserves in the Nimar division is briefly this: In 1879 the Conservator of Forests submitted for the Chief Commissioner's approval and sanction proposals to select and demarcate as first class reserves certain 2nd class reserved forest areas in the Nimar district. These proposals of the Conservator were based on the following grounds:—

(*a*) In view of the large demand created by the Railways in the Nerbudda valley for fuel and building material; the former for local consumption on the lines, and the latter for export for which the existing railways offered great facilities.

(*b*) In view of the future extension of cultivation, which demands that areas fitted for cultivation should now be eliminated from the tracts, which it is necessary, in the interests of the population of the district and the country at large, to maintain permanently under forests.

With the above objects in view the Conservator indicated, as a tentative measure, certain forest tracts, in all 16 blocks, and which forest blocks were marked on a map which was also submitted with his proposals. These proposals in time were approved by the Chief Commissioner, and sanction was accordingly conveyed to the Conservator, in Secretary's letter No. 2782-141, dated 3rd July 1879, to make certain of the second class reserves in the Nimar district into 1st class

reserves and to the demarcation of their boundaries being commenced at once. In pursuance of this sanction the detailed examination, survey, and demarcation of the boundaries of the selected forest tracts were commenced in the open season following. It had already been reported by the Conservator that demarcation of these forests would be a work of time, and which might probably occupy two or three years in its completion. As the work progressed it was, however, discovered that the Forest Department could not go on any further with the survey and demarcation of the boundaries, since it was evident that the boundaries of the forests had never been fixed, or if fixed at all, not correctly so at the time of the land revenue settlement. It therefore became necessary to have the boundaries of the forests re-adjusted and fixed in the first instance, before proceeding any further with the work of their final survey and demarcation. The subject, at this stage, was warmly taken up by Colonel Repton, the Deputy Commissioner of Nimar, and to his personal efforts, mainly, is due the settlement of forest boundaries in that district. In April 1883 Colonel Repton reported that the boundaries of the 2nd class reserves had all been fixed by him, and that there remained nothing more for him to do in that respect except to hand the forests over to the Forest Department. In the meanwhile, the Forest Department had not been idle, as it also took up, *parri passu*, and finished a large portion of the professional survey, and, in several instances, it also completed the permanent demarcation of the boundaries of several forest tracts as soon after as the boundary settlement officer had done with the latter. The two agencies thus worked in concert, the Deputy Commissioner in advance, the Forest Officer following after him, with his more correct professional survey. Although at this stage there was still remaining a large quantity of work for the Forest Department to do in order to complete the more accurate survey, and demarcate all the boundaries, yet as the boundaries had practically been more or less accurately laid down by the Deputy Commissioner, the time appeared to him to have come, when the whole of the forests, selected by the Forest Department, but now increased to 25 blocks, 9 more than in the original proposal, should be formally transferred to its care and management. With this view the Commissioner of the Nerbudda division was addressed for favour of his opinion and to accord his approval to the transfer of the now 25 selected forest blocks being carried out. In a critical examination of the records which had been submitted to the Commissioner, this Officer was, however, able to detect and point out certain inaccuracies of detail in them, such as verbal errors in the accompanying lists, and spelling of names, &c. These records were therefore referred back to the Deputy Commissioner of Nimar and the Conservator of Forests, for correction. The necessary corrections having accordingly been made, the whole question was again sent up to the Commissioner for final disposal, and whose approval to the transfer was this time obtained. But before the Commissioner's approval could be secured, the official year 1883-84 had lapsed, and it hence became necessary, if the transfer of the forests was to appear in the Provincial Forest report for that year, to obtain the sanction of the Chief Commissioner, to show the transferred forests in the list of 1st class reserves. This permission was accorded, but under a proviso that the history and nature of the said transfer are described in clear and definite terms in the Annual Report.

10. As regards the Erjher and Dhuga forests, now shown as transferred to 1st class reserves, it is necessary to explain here that these forests were reserved under the old Act some years ago, and were, prior to the Notifications under Section 34 of Act VII of 1878, always shown in the annually published list of reserved forests, although they were at that time managed by the Deputy Commissioner of Wardha. However, since the issue of the Notification above referred to, and when it had become necessary to distinguish between reserved forests managed and controlled exclusively by the Forest Department, and those still remaining under the combined management of the Forest Department and Deputy Commissioners, by calling the former 1st class and the latter 2nd class reserves, the reserves of Erjher and Dhuga were excluded from the annually published list of reserved forests under the direct management and control of the Forest department, on the ground that, since they were not managed directly and wholly by the Officers of the Forest Department, they

could not be considered as first class reserves. A Forest Officer having since been appointed to the Wardha district, the above objection no longer existed, and the Chief Commissioner's sanction was accordingly obtained to the formal transfer of these forests to the first class reserves.

Examination of 2nd class Reserves.

11. With the view to making selections for transfer to 1st class reserves from such of the 2nd class reserves, which, from their relative position in regard to centres of demand for forest produce, renders their maintenance as forests both important and necessary, the following work, in selection and examination of new areas, was completed during the year. Detailed reports accompanied by maps and plans of the forests have, in each case, been submitted to the Conservator:

District.	Name of forest.	Number of blocks examined.	Area.		Remarks.
			Acres.	Total.	
Jubbulpore ...	Sonpur ...	5	24,277		Proposed 1st class reserves near Jubbulpore.
	Dasrutpur ...	2	5,477	29,754	
Mandla ...	Forests on the Nerbudda river.	8	68,540		Proposed 1st class reserves on the Mandla-Jubbulpore boundary.
	Barela 1st class reserve.	3	2,168	70,708	Proposed addition to the Barela reserve.
Saugor, Damoh, Narsinghpur	South Eastern Nerbudda forests.	Several.	179,200	179,200	This reserve will include portions of three districts.
Betul ...	Forests on Chhindwara boundary	20	48,895		Proposed 1st class reserve.
	Khamapur 1st class reserve.	2	3,357		Proposed addition to Khamapur 1st class reserve.
	Forests on the Berar boundary.	14	36,702	85,954	Proposed 1st class reserve.
Chanda ...	Bhanduk forest ...	1	43,764	43,764	Proposed addition to the Moharli 1st class reserve, sanctioned in Secretary to Chief Commissioner, letter No. 2461-112, dated 20th May 1884.
		Total area ..		412,380	

Jubbulpore.

12. The proposed 1st class reserves in this district will, if sanctioned, comprise, along with the Lower Gour 1st class reserve, an area of 55 square miles of 1st class reserves lying within a short and easy distance of the city of Jubbulpore. The present condition of the Sonpur and Dasrutpur blocks is poor; and in consequence of the heavy drain there has been on these forests for some time past, they have now been closed to all cutting. In addition to the Government reserves, the Divisional Forest Officer has also examined and reported on the condition of three adjoining private forests of Manera, Puttrah and Hathidole, with the view to these forests being acquired, if so desired, by exchange.

13. The 8 forest blocks examined in this district are situated along the Nerbudda river, and to the north of the Jubbulpore-Mandla road, and along the western boundary of Mandla.

Mandla.

These forests all lie within easy and accessible distance of Jubbulpore. They contain in parts excellent forest growth of a mixed kind, in which teak is frequently the principal tree, and which there attains a fairly large size. The boundaries of these forests have all been demarcated. It is further proposed to take up three blocks of 2nd class reserves and add them to the Barela 1st class reserve, to which these blocks adjoin. As outlying 2nd class reserves their management is difficult, and hence the Deputy Commissioner proposes that they be now absorbed into the Barela reserve.

14. It is proposed to take up all the 2nd class reserves situated in the south-eastern parts of the Saugor district, add to them the adjoining reserves in the Damoh and Narsinghpur districts, and thus form of the whole one large compact 1st class reserve, which would ultimately become a source of permanent supply to the populations residing in the surrounding parts of Saugor and Narsinghpur, and the more open parts of the higher Nerbudda valley. The forest area has been closely examined by the Divisional Forest officer, Saugor, who has submitted, with his report, maps as well as a sketch of the proposed boundary for this reserve. The subject will, however, be specially and fully reported on hereafter, that is, as soon as preliminary matters have been arranged with the Civil district authorities. The area of this proposed 1st class reserve will be about 280 square miles, with a boundary line estimated at 114 miles in length, 49 of which is already made up of natural features such as rivers, nalas, &c., and only 65 miles would therefore have to be newly demarcated.

Saugor. Damoh. Narsinghpur.

15. In this district it is proposed to transfer to the 1st class all the 2nd class reserves which are situated along the border of the Chhindwara district; to do the same as regards the forests lying along the Berar boundary; and to add two adjoining, but outlying, blocks to the 1st class reserve of Khamapur. These proposals have as yet not generally met with the approval of the Deputy Commissioner of Betul; but as further discussion of the question is necessary, the subject has been allowed to stand in abeyance for the present, until the Conservator has had an opportunity of a personal interview on the subject with the Deputy Commissioner.

Betul.

16. The transfer of the Bhanduck block has already, since the year closed, received the sanction of the Chief Commissioner. Proposals will shortly be submitted for the transfer, to 1st class reserves, of several other forest blocks lying in the Northern parts of the Warora pergana, and the extensive bijasal and bambu forests which extend, from the boundaries of the Mohurli reserve down to the Wardha river in the south. These, along with proposals to take up certain teak forests on the Wynegunga river, and the excellent and very fine teak forests situated in the block of hills in the north-eastern parts of the Ghote-Arpilly pergana, will be the principal work in the Chanda Division for the next two years.

Chanda.

Boundaries.

17. Boundary lines, with boundary marks, of all 1st class reserves were cleared and maintained in proper order during the year. The only exception to this state of things was in the case of the Nimar division, due to portions of the boundaries of some of the newly transferred reserves not having as yet been fully demarcated. But the work is making good progress, and it is hoped that it will be completed before the close of the current year.

First class Reserves.

The present total length of the external boundaries of 1st class reserves is 2,888 miles 2 furlongs and 1 chain. Information, as to the total length of internal boundaries, is not yet complete as regards all Divisions; but the subject is well before Divisional Officers, and it is expected, that, before long, the boundary registers of the 1st class reserves, in every forest division in these Provinces, will be quite complete, and will thereafter be strictly maintained.

18. The statements herein following, shows the actual condition of boundary lines and boundary marks at the close of the year in each Forest Division.

1	2	3									4									5									6			7		8		9	
Number.	Division.	Length of Boundaries.									Boundary lines cleared during the year.									Boundary lines remaining uncleared at close of the year.									Total of columns 4 and 5.			Total number of boundary marks.		Number in good repair at close of 1883-84.		Number in bad repair at close of 1883 84.	
		External.			Internal			Total.			For protection from fire.			For demarcation.			Total.			Artificial.			Natural such as rivers, nalas, &c.			Total.												
		Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Mile.	Furlong.	Chain.	Masonry pillars.	Other marks.	Masonry pillars.	Other marks.	Masonry pillars.	Other marks.
1	Direction ..	27	4	7		.	.	27	4	7	7	7	4	10	7	4	18	6	8	...	..	...	8	5	9	8	5	9	27	4	7	25	...	24	...	1	...
2	Mandla ...	358	1	2	..	.	..	356	1	2	178	4	8	141	4	7	320	1	5	...	...	...	35	7	7	35	7	7	356	1	2	310	966	310	996	...	...
3	Hoshangabad ...	239	2	0	..		.	239	2	0	148	5	1	73	7	6	222	4	7	...	.	...	16	5	3	16	5	3	239	2	..	53	469	24	460	34	...
4	Betul ...	230	6	4	43	2	0	274	0	4	59	0	6	134	4	..	193	4	6	...	..	...	80	3	8	80	3	8	274	0	4	120	1,404	29	5	...	...
5	Nimar ...	620	4	3	64	1	0	684	5	9	165	1	2	230	2	8	395	4	0	75	0	9	211	1	0	289	1	9	684	5	9	166	3,963	137	3,162	29	793
6	Chanda ...	193	0	2	30	0	0	223	0	2	90	7	6	132	..	6	223	0	2	...	...	...	...	.	..	...	..	..	223	0	2	...	1,541	...	1,541	...	...
7	Seoni ..	337	6	5	...			337	6	5	147	1	2	190	5	3	337	6	5	...	.	..	...	..	...	...	...	...	337	6	5	251	..	240	...	11	...
8	Saugor ...	209	5	5	...	.	.	209	5	5	136	6	8	72	6	7	209	5	5	...	...	...	...	...	...	...	...	..	209	5	5	140	2,347	140	2,347	...	...
9	Wardha ...	73	4	0	...	...		73	4	0	73	4	0	...	..	.	73	4	0	...	..	.	...	.	..	...	...	.	73	4	0	...	...	...	...	...	...
	Total ...	2,288	2	8	137	3	6	2,425	6	4	1,007	6	7	986	7	1	1,994	5	8	75	0	9	352	7	7	431	...	6	2,425	6	4	1,070	10,890	904	8,481	75	793

19. The cost of clearing boundary lines and demarcation of new boundaries of 1st class reserves has been Rs. 3,353-14-0. This sum does not however include the charges debitable to protection from fire in the case of those reserves in which the boundary line is annually cleared as a protecting fire line, charges falling under this latter head are debited to A VIII e, protection from fire.

20. The boundary details, of each first class reserve, will be found in a statement which appears as Appendix A. to this report.

Second class reserves.

21. The following abstract shows the progress which has been made, from commencement up to 31st March 1884, in the Survey and demarcation of forest boundaries in the 2nd class reserves:—

		Miles.	Ch.
Miles surveyed	...	1,852	35
Miles demarcated	...	1,660	52
	Total cost Rs.	8,121	

22. The following statement shows the details of this work in the several districts:—

Division.	District.	Length of boundary surveyed.		Length of boundary demarcated.		Total cost.		
		Miles.	Chains.	Miles.	Chains.	Rs.	s.	p.
Nagpur Division ...	Nagpur ...	87	47	87	47	91	4	2
	Chanda ...	225	...	225	...	740	2	4
	Wardha ...	54	4	18	25	481	5	11
Jubbulpore do. ...	Jubbulpore ..	117	17	...	...	452	10	0
	Mandla ...	63	33	...	...	150	0	0
	Damoh ...	434	5	187	13	800	9	0
Nerbudda do. ...	Betul ...	206	13	..	...	646	13	11
	Hoshangabad ...	117	8	112	14	1,355	3	11
	Chhindwara ...	411	22	411	22	1,028	14	7
	Narsinghpur ...	136	46	3	11	1,278	0	4
Chhattisgarh do. ...	Sambalpur ...	...	...	611	...	1,086	3	0
	Bilaspur ..	...	...	5	...	9	14	6
	Total ...	1,852	35	1,660	52	8,121	2	5

23. The progress made up to close of the year has already been specially reported in this office letter No. B 68, dated 12th August 1884. This progress, it must be seen, has been more or less slow, owing to the many difficulties that were in the way of the rapid settlement of disputed boundary cases. Deputy Commissioners, however, are now aware of the orders of the Chief Commissioner regarding the procedure which should be followed by them in demarcating forest boundaries; and doubtless, now that the organization dealing with these matters is more perfect than it has hitherto been, the close of the current year will show considerable more progress as having been made than was possible in the years past.

24. Survey and demarcation of boundaries are in progress in the following districts,—those to which an officer of the superior staff of the Forest Department is attached, a note to that effect is put opposite the name of the district—

Nagpur Civil Division ... Nagpur, Forest Officer.
Bhandara, do.
Wardha, do.
Chanda, do.

A Forest officer for Balaghat will be made available by 1st November.

Jubbulpore Civil Division ..	Jubbulpore. Damoh. Mandla.
Nerbudda Civil Division ...	Hoshangabad, Forest Officer. Nimar, do. Betul, do. Narsinghpur, do. Chhindwara, Forest Officer since June 1884.

25. In the Chhattisgarh Division no special establishment, for carrying out survey and demarcation of boundaries of reserves, has been sanctioned; but the work of demarcation has nevertheless made considerable progress in Sambalpur, and a small attempt to the same effect has also been made in Bilaspur. It will be observed that in 8 out of 11 districts in which both survey and demarcation of forest boundaries are being carried out, Forest Officers of the superior staff are now attached to aid Deputy Commissioners. And it will shortly be possible to spare a Forest officer for the Balaghat district, to conduct similar operations during the ensuing open season in that district. For the Chhattisgarh Division a Forest officer has not yet been made available, and it is now, moreover, questionable, seeing that there is an impending land revenue settlement, whether it is expedient to initiate the work of demarcation of forest boundaries as soon as a Forest officer is available or to wait until the settlement has done its work. The Commissioner of the Division is of opinion that the work, in the district of Bilaspur, should be held in abeyance until settlement operations commence, it can then be thoroughly and efficiently carried out under the orders of the Settlement officer with no additional cost, as a part of the settlement of the district.

26. The subject at this stage is, however, one in which the orders of the Chief Commissioner are necessary as to what action should be taken to give definition to, in the immediate future, to all the more important and valuable forest areas in the Chhattisgarh Division.

27. The following remarks embody the details of work completed, in each Division and district, during the year in keeping clear boundary lines, maintaining boundary marks, and demarcation of new boundaries.

1st Class reserves.

Direction Division.

28. The boundary lines of the two first class reserves, namely Hathibari and Kuntra nala, were maintained in a state of efficiency. The boundary line of Hathibari reserve, being cleared annually for purpose of protecting the forest from fire, is necessarily kept up in good condition.

Mandla Division.

29. Boundary lines of all 1st class reserves in this division were cleared and maintained during the year for purposes of

	Miles.	Furlongs.	Chains.
(a) Demarcation ...	141	4	7
(b) Protection of forests from fire ...	178	4	8
Total cleared ...	320	1	5

The cost of clearing boundary lines for purpose of demarcation only and for the repairs and up keep of boundary marks, was Rs. 382-5-10.

30. The following additional work, in demarcation of new boundaries, was completed during the year:

Demarcation has been completed as regards the Lower Gour forests. The total length of boundary line of this reserve is 33 miles and 30 chains, and the cost of demarcation, inclusive of the cost of erecting boundary marks, was Rs. 128-3-0 The boundary has also been surveyed, and a boundary register prepared. The area of this reserve is 5,517 acres only, so that the length of its boundary is out of all proportion to its area; but this was inevitable and unavoidable, because of the relatively high value of the forest due to its proximity

to the city of Jubbulpore, and the fact that this reserve is bordered on all sides by private lands. The maintainance of this tract as a forest is, in any case of much importance, both because of its high productive value and, also, because of its position near a large city which is the centre of a considerable demand for forest produce.

31. The boundary of the Bijpura forest, block No. 66, recently transferred, has also been demarcated, surveyed and a boundary register prepared for it. The length of boundary of this reserve is 17 miles, along which have been erected, in addition to the cleared boundary line, 156 boundary marks. The cost of these operations was Rs. 59-15-1. For administrative purposes the Bijpura reserve was incorporated with the Bijragogarh reserve, which is distant only one mile from the first named reserve. However, since the year closed, by order of the Chief Commissioner the Bijpura reserve has reverted to the 2nd class reserves.

32. In the Bunjar valley forest the boundary of which on the south-east and south sides is located on very difficult, and almost inaccessible ground, an attempt has been made with fair success to carry the boundary along more easy and accessible ground. The altered boundary will thus include about 12 square miles of additional forest. The new line has been surveyed, but for the present is only temporarily demarcated, as it is proposed to make a further alteration by moving the boundary of the reserve on the south-west side, right down to the Bunjar river. If this last proposal is adopted, another 12 square miles of good forest land will be added to the Bunjar valley reserve. It is extremely important that not only should both these proposals be now carried out, but that in fact every available acre of Sal bearing land, situated on the Bunjar river, should also be brought into the reserve to be there maintained permanently under forests, because the locality is one that is not only well adapted for the full development of Sal forests, but the presence of the river Bunjar offers the ready means of transport for the produce cut out of these forests This question will be taken up and reported on separately, as soon as all preliminary details have been arranged with district officers.

Hoshangabad Division.

33. Boundary lines of the 1st class reserves in this Division were cleared during the year. The total length of boundary lines in the three reserves is 239 miles, and 2 furlongs. Of this length 222 miles 4 furlongs, and 7 chains were cleared of regrowth, and the remaining length 16 miles 5 furlongs and 3 chains consisting of natural boundary formed by rivers did not require to be cleared. The total number of boundary marks in the three reserves of Bori, Rajaborari, and Saonligarh is :—

Masonry pillars	... ...	58
Wooden posts	... ...	469

Of the masonry pillars 34 were in a condition, at the close of the year, to want repairs to be done to them, which will be carried out as soon as contractors can be obtained for that purpose. The total cost for clearing and maintenance of boundary, for purposes of demarcation only, in this Division, for the year was Rs. 39-12-6.

34. The Deputy Conservator of Forests reports the existence of a dispute which has arisen between the Malguzar of Lokertalai, and the Forest Department, in respect of the boundary of the Saonligarh reserve. The Malguzar's contention is that portions of the village areas of Jirriadoh, and Jamnagre, which are his property, have been included within the Saonligarh 1st class reserve. The matter is before the Deputy Commissioner of Betul. The question, however, cannot be disposed of until a correct survey, carried out by a responsible officer, has been made of the adjacent Malguzari property, in order to test whether in fact the Malguzar has been deprived of any portion of the land given to him at the last settlement.

Betul Division.

35. The total length of boundary line in the two 1st class reserves of Bowergarh and Khamapur in this Division, is as follows :—

		M.	F.	Ch.
(a)	External boundary ...	230	6	4
(b)	Internal boundary ...	43	2	0
	Total	274	0	4

of which were cleared during the year for purpose of—

		M.	F.	Ch.
(a)	Demarcation ...	134	4	0
(b)	Protection from fire ...	59	0	6
	Total cleared ...	193	4	6

The length of boundary that was not cleared was that portion of it formed by river.

The number of boundary marks is as follows :—

(a)	Masonry pillars	120
(b)	Other marks	1,404

Of these, 91 masonry pillars, and 1,399 other marks, which were not in good condition at the beginning of the year, were repaired during the year at a cost of Rs. 88-4-0. All boundary marks of 1st class reserves in this Division are now in thorough repair.

The total charges incurred on the maintenance of boundaries, for purpose of demarcation, during the year was Rs. 97-4-0.

Nimiar Division.

36. The total length of boundary lines of 1st class reserves in this Division, inclusive of the newly transferred reserves, stood at the close of year as follows:—

		M.	F.	Ch.
(a)	External boundaries ...	620	4	3
(b)	Internal do. ...	64	1	6
	Total ...	684	5	9

During the year the demarcated boundaries were cleared for,

(a)	Purpose of demarcation ...	230	2	8
(b)	Purpose of protection from fire..	165	1	2
	Total cleared ...	395	4	0

The balance of demarcated boundaries not cleared during the year, consisting principally of river boundary, is 289 miles, 1 furlong and 9 chains.

The following work in demarcation of new boundaries was completed during the year :—

	M.	Ch.
Boundary surveyed and demarcated ...	144	8·76

The total cost of maintaining old boundaries, and demarcating new boundary lines, was Rs. 2,210-15-8.

Chanda Division.

37. The boundaries and boundary marks of all first class reserves in this Division were cleared, and maintained in proper order. The total length of boundary lines is as follows :—

		M.	F.	Ch.
(a)	External	193	0	2
(b)	Internal	30	0	0*
	Total ...	223	0	2

Cleared for purposes of—

(a)	Demarcation ...	132	0	6
(b)	Protection from fire ...	90	7	6
	Total cleared ...	223	0	2

The total number of boundary marks is as follows :—

(a)	Moharli reserve	1,323	All in good order.
(b)	Ahiri reserves	218	

The following additional work has been done in this Division :—

(a), the survey and demarcation of 30 miles of internal boundaries of villages, with proprietary rights, included within the Moharli reserve ;

(b), the survey and preliminary demarcation of the new forest bearing tract in the Ahiri Zamindari, about to be purchased by the Forest Department, and comprising an area of 60,591 acres.

The total length of boundary of this tract is 53 miles.

The total charges incurred for clearing and maintaining old boundaries and demarcation of new ones was Rs. 496-10-0.

* Liable to correction hereafter.

30. The boundary lines of the first class reserves were maintained in good order during the year for—

Seoni Division

	M.	F.	Ch.
(a) Purpose of demarcation	190	5	3
(b) Protection of forests from fire	147	1	2
Total cleared ...	337	6	5

The cost of clearing and maintenance during the year was only Rs. 11-8-0.

The Divisional officer reports that boundary marks, other than masonry pillars, were not in a good condition of repair, and that it was difficult even to find some of these marks. It will therefore be necessary to renew the marks wherever wanting along the whole line of the boundary of the great Satpura reserve. The Divisional officer's attention was directed to this important work during the early part of last open season. He will be again directed to comply with instructions, and maintain, in a state of good repair, all the boundary marks appertaining to the reserve in his division.

39. The boundaries of all first class reserves in this division were cleared and maintained in proper order.

Saugor Division.

	M.	F.	Ch.
(a) External boundary	209	5	5
(b) Internal boundary	..	...	
Total ...	209	5	5
cleared during the year for the purpose of—			
(a) Demarcation	72	6	7
(b) Protection from fire	136	6	8
Total cleared ...	209	5	5

The number of boundary marks consist of—

(a) Masonry pillars	140	All in good order.
(b) Other marks	2,347	

The cost of maintenance during the year was Rs. 79-8-0.

40. The length of demarcated boundaries of the two reserves, recently transferred to the 1st from the 2nd class reserves, is 73 miles and 4 furlongs. The boundary lines were maintained in good order, all vegetation on them having been cleared at a cost of Rs. 35-14-0.

Wardha Division.

Second Class reserves.

41. The Forest officer reports forest boundaries as being in fair order. During the year this officer inspected the boundaries of a considerable area of forest in his charge, and found that many of the old demarcation lines and other marks put up at the settlement still existed. During the year there were surveyed, and permanently demarcated, 87 miles and 47 chains of boundary lines, at a cost of Rs. 91-4-2. Demarcation has been effected by cutting a line clear of all growth, 20 to 40 feet wide, according to the size of area of the block under demarcation, and laying down trench and ridge marks at every angle, and at other points along the line, where a mark was necessary. In many of the 2nd class reserves, in this district, the original boundaries, as laid down at the settlement, have to some extent been since maintained by the lines being occasionally cleared by neighbouring malguzars who, for the labour thus given by them, were paid with the produce cut off the lines. The Forest officer further reports that, considering the manner in which the Government and private forests interlace, it is surprising that so few inaccuracies have as yet come to light in respect of the boundaries of the Government reserves.

Nagpur.

42. Special arrangements where made under orders of the Chief Commissioner for the settlement, survey and demarcation of forest boundaries in this district. A Boundary and a Forest officer were appointed, and special instructions were drawn up for their guidance in respect of procedure to be followed, in Secretary's printed letter No. 610-1, dated 8th February 1884. This procedure, briefly, is to the effect that the boundary must be laid down by the Boundary officer himself in person, in accordance with the settlement records and the actual possession he finds in each case; the Forest officer only following up to survey and demarcate the

Bhandara.

boundary after it has been fixed by the Boundary officer. But work, on these lines, had scarcely commenced when the year closed, and consequently there has been no progress to report. Since then, it is to be regretted, that the Boundary officer, who had meanwhile fallen ill, has died.

The forest boundaries in this district are reported to be more or less incorrect, and consequently a considerable number of disputed cases have already been recorded, which promise to give some trouble before their final settlement is achieved.

Wardha.

43. The boundaries of the 2nd class forests in this district are also reported to be in an unsatisfactory condition, and the Commissioner of the Division is, therefore, of opinion that a special officer should also be appointed next cold season to take up this matter energetically, as had been done in respect of Bhandara. The Forest officer reports the following progress as having been made :—

		M	Ch.
Boundary surveyed	... ...	54	4
Boundary demarcated	... ...	18	25

Charges incurred Rs. 481 5-11

Progress has been slow, and is attributed mainly to the many disputes which have arisen during the course of the work. The Deputy Commissioner is of opinion,—an opinion which the Officiating Conservator of Forests fully concurs in,—that the method, hitherto followed in the Wardha district, has been faulty in one essential feature, namely, that in Bhandara a special Boundary officer, a member of the Commission, has been appointed to deal with disputed cases, and thus minimise references to the Deputy Commissioner, whereas in Wardha, a Revenue officer of the rank of Kanungo, is deputed to accompany the Surveyor to mark down the boundary lines for the latter to survey. In case of a dispute arising, the Kanungo has no power to deal with it, and the Deputy Commissioner, to whom it must be referred for final decision, has not the time to dispose of it speedily, and hence the delays, and the unsatisfactory results following on such delays, that have characterised the progress of this work in the Wardha district.

Chanda.

44. The following progress has been made :—

		M
Boundary surveyed	...	225
Boundary demarcated	...	225

Total charges incurred Rs. 740 2-4

Considerable further progress would, doubtless, have been made during the past year, but that the surveyor who was engaged on the work had been taken off it and employed, during a part of the time, in surveying interior boundaries in the Moharli 1st class reserve, and the boundary of the new tract of forest, in the Ahiri Zamindari, which the Forest Department is about to purchase. The Deputy Conservator, in charge of the Chanda division, is now engaged upon a complete revision and check of forest Maps in his possession, by comparing them with the maps filed in the settlement records of the district. This is being done with the view to starting operations, next open season, with a well considered plan for checking the surveyor's field work, and of helping him to make better progress with it than has yet been possible. On the whole, it may be said, that the boundaries, of the 2nd class reserves in this district, which were laid down at the time of the settlement, and which subsequent to that event were verified and recorded by the Revenue Survey, are, as a rule, well defined on the ground and have been found, when checked, to be approximately correct. No boundary disputes have, up to date, been reported from this district.

Balaghat.

45. Nothing has been done, in this district, to demarcate forest boundaries, and no special establishment has as yet been entertained for that purpose. It is proposed to attach shortly a Forest Officer to this district, with the special object of his taking up

Betul.

55. In last year's report, paragraph 34, it was stated,—though through a misapprehension of this office,—that the divisional forest officer reported, that the question of boundaries in this district had been settled, and that the boundaries had all been laid out and marked on the ground in a proper manner. This statement is only so far correct in that it referred to the work done at the time of the settlement; but not that it had since been found necessary to re-survey and re demarcate some of these boundaries. The progress now made in this respect, during the year, will be seen by the statement given below :—

		M.	Ch.
Boundary re-surveyed and demarcated	...	206	13

Charges incurred up to 31st March 1884, Rs. 646-13-11

The Forest Officer, Betul, reports that the survey of boundaries had, prior to the commencement of the year, been carried out under the direct orders of the Deputy Commissioner, but that since that date he has held charge of this operation. Demarcation is effected by cutting and clearing a line, 15 feet wide, and setting up boundary marks consisting of an oblong trench and corresponding ridge into the centre of which is fixed a round post, of which about 3 feet appears above the top of the ridge. The post is marked with a number which corresponds with one in the boundary register. The labour, given in cutting and clearing the boundary lines, is paid for by the produce cut off the line being taken by the labourers.

During the last rainy season, when field work was not in progress, the divisional forest officer and the surveyor were occupied in making maps of the 2nd class reserves, by reducing and compiling them from the settlement maps placed for that purpose at their disposal.

The maps, which are now being made, are on a scale of four inches to the mile; and it is expected that, during the current recess season, this work will be completed.

Narsinghpur.

56. The following is an extract from the Deputy Commissioner's report :—

"The boundaries of our forests were surveyed and settled during the last Revenue settlement of the district, but the demarcation was not in all respects perfect. Under these circumstances a re-survey and demarcation of the boundaries was, under the orders of the Chief Commissioner, commenced in October 1882. * * * The principle followed in laying down the boundaries is that laid down in the Divisional Commissioner's No. 640-C of 14th December, viz: that in instances where the boundary marks do not agree with the settlement *Sajhra* and *Kashrah* they are set aside and a new line is marked out corresponding with the settlement records."

The following progress has been reported from this district :—

		M.	Ch.
Boundary surveyed	...	136	46
Boundary demarcated	...	3	11

Charges incurred up to 31st March 1884...Rs. 1,278-0-4

The Deputy Commissioner explains cause of delay in demarcating boundaries, by ascribing it to the existence of disputes and since demarcation cannot proceed so long as disputes have not been adjudicated on.

The Commissioner of Division remarks on this report: that it is very desirable that this work should be completed as soon as possible, and as far as possible to the satisfaction of those concerned. He also records his dissatisfaction with the progress hitherto made and with the agency employed to do the work.

Chhindwara

57. The Deputy Commissioner reports that the work of demarcating the forests is progressing, but slowly, and estimates that the boundaries of about 90 forest blocks have been fully demarcated. It is necessary to explain here, that in this district, besides several large and compact blocks of forests, there are numerous small blocks scattered all over the district, and which are, many of them, from the isolated positions

they occupy in the open populated portions of the district, very important forests to the surrounding population. The statement below shows the progress that has been made:—

			M.	Ch.
Boundary surveyed	...	...	411	22
Boundary demarcated	...	...	411	22

Charges up to 31st March 1884, Rs. 1,028 14 7

The following remarks, found in paragraph 38 of the Deputy Commissioner's annual Forest Report, are extracted below :—

"It appears that in many instances, owing to imperfect demarcation of boundaries after the settlement, considerable areas of forest have been taken into Malguzari villages adjoining the forest. In such cases delay is caused in finding out the true boundary, and of course opposition is also met with on the part of the Malguzars. It would be well, I think, if the assistance of a general supervisor, as suggested in para. 10 of the Chief Commissioner's letter No. 610-1, dated 8th February 1884, received under cover of Commissioner's No. 1803, dated 7th April 1884, could be given us. The Tahsildars are too much occupied with judicial work to be able to look after it, and neither I nor my assistants have time for it for the same reason."

With reference to these remarks it should be stated here that a Forest Officer has since been posted to this district, to assist the Deputy Commissioner in the administration of the 2nd class reserves.

Raipur.

58. The Deputy Commissioner reports as follows :—

"The survey and demarcation of the forests has not been commenced. The boundary marks that were put down at the time of the settlement have, in many places, disappeared, they having been only of a temporary nature. There are no trustworthy maps of the reserves, and indeed, until recently, there were no maps at all. An attempt has been made within the last few years to prepare such maps, but those that have been drawn up are very rough productions, without any claim to accuracy in detail. Even clearance lines have not been cut between the reserves and the adjacent Malguzari or Zamindari forest. The demarcation work may perhaps be taken up at the same time as the new Revenue Settlement that will shortly be made in this district. Whenever it is undertaken a special establishment will have to be sanctioned to carry it through, as the task is far beyond the power of the Forest establishment. Until steps are taken in this direction, forest conservancy in the district cannot be considered to have been begun on a right basis. It is much to be regretted that the services of a special officer cannot be spared by the Forest Department for Raipur, where he would find plenty of work to occupy his time. You have expressed your concurrence in this view on an application being made to you for such an officer, and have kindly promised to depute one should an opportunity occur."

The Commissioner of the Division, in forwarding the annual Forest report, records the following remark in reference to certain cases of forest maladministration which had come to his notice :—

"It would hardly be possible to give clearer evidence of the urgent necessity for a Forest Officer who could make the administration of this valuable Government property his sole task."

Again, in noticing the remarks recorded by the Deputy Commissioner, in connection with forest demarcation, and whose remarks have been quoted above, the Commissioner observes :—

"As regards demarcation it should certainly be taken in hand at the Settlement, when it is decided what description of survey is to be effected in Raipur, it will then be necessary to arrange for the requisite Forest establishment to go over the forest boundaries *pari passu* with the revenue survey. As it has now been delayed so long, I do not think that Government interests will suffer through the short further delay that will now be necessary."

59. It is clear from the foregoing remarks that a Forest Officer for the Chhattisgarh Division is urgently wanted. Chhattisgarh as a Forest Division was sanctioned by the Chief Commissioner in orders conveyed in Secretary's letter No. 4098-233, dated 2nd November 1882. Since then the Conservator has applied, in his letter No. B.17., dated 25th April 1883, for the services of another Deputy Conservator to be added to the staff in these Provinces. This proposal, however, has not yet been sanctioned, and it has, as yet, been found impossible to post a Forest Officer, who would be of senior rank, to the Division from among the available staff sanctioned for these Provinces.

60. The Deputy Commissioner reports that very little was done during the year in demarcating forest boundaries; only about 5 miles of boundary was demarcated, as an experiment, to obtain data upon which to calculate the total cost of the operation for the district. The experiment showed that 51 boundary pillars of the kind recommended by the Conservator of Forests, cost, in putting up, Rs. 9-14-6, or about annas 2 and pie 1 per pillar. The experiment so far was carried out on a site most favourable for it, and that, therefore, further variation in the cost per pillar must be expected; but yet, on the whole, the Deputy Commissioner is of opinion, that the ultimate average cost per pillar will fall well within eight annas. For a description and plan of the boundary pillar here referred to, see Appendix B.

Bilaspur.

61. In this district the reserved forests are comprised within 40 blocks. It is now reported that boundary marks have been set up round 34 of these blocks. This work has been accomplished by the ordinary Forest establishments sanctioned for this district, plus cooly labour, which has been paid for separately. The Deputy Commissioner is of opinion, that it is of the utmost importance, in the interests of Government, that these boundaries should now be revised. This, it may be remarked, was also pointed out in paragraph 37 of last year's report as being necessary.

Sambalpur.

As regards the remaining 6 blocks, it is reported that demarcation is more or less in advance, but that completion has been rendered impossible, owing to the boundaries being disputed. It is, however, expected, that during the current year, these disputed cases will be taken up and settled, since revision of all boundaries marked during the settlement, has now become necessary, in view of revenue survey operations commencing next cold season.

The Deputy Commissioner further reports that, under orders received, the adjustment of boundary disputes is to be restricted only to the determination of the land actually taken up at the settlement, and the much needed revision of forest areas, so as to include all forest land that should be taken up by Government, is not to be attempted at present.

During the year, successful efforts were made to keep open, clear of growth, the lines demarcating forest boundaries, by inducing the neighbouring resident populations to make the clearings, and paying themselves with the produce cut off the lines. All necessary repairs to boundary marks were likewise carried out at the same time.

With reference to the above, the Commissioner of Division remarks as follows:—

> "I think the opportunity of the Revenue Survey party, entering Sambalpur next cold season, should certainly be taken advantage of, to have all the Government forests carefully and thoroughly demarcated."

CHAPTER II.

Surveys, Working Plans and Annual Plans of Operations.

Surveys.

62. Surveys made by departmental agency were confined entirely to forest boundaries, and to the preparation of new and perfection of old boundary registers for 1st class reserves. Boundary surveys in the 2nd class reserves are made with the plane table only, hence, no boundary registers exist for them at present. The immediate object of these last operations is to fix and demarcate the boundaries of the 2nd class reserves in accordance with the actual lines which are found laid down for them on the ground, or those which were drawn on maps at the time of the settlement. However, whenever the boundaries of these reserves have been correctly fixed and demarcated, it will then be necessary to prepare boundary registers for them. This work will therefore not be taken in hand just at present, but must be allowed to stand over until the boundaries of the forests have been correctly fixed and demarcated. Operations with the latter object in view, are now being pushed on with all the vigour possessed by the department. The details of the progress made in this respect will be found recorded in a preceding chapter.

63. No general working plans have been framed for regulating the future yield and working of the reserved forests. This question of framing working plans requires to be taken up, and dealt with separately, by a specially qualified agency, having the necessary leisure to do the work in as perfect a manner as existing circumstances will allow of its being done. The officers in these Provinces, who are best qualified to aid in carrying out this work, are those who usually have the heaviest forest divisions to manage single handed, and who, therefore, have little or no time to spare from other duties, to devote to a subject which demands the most careful preparatory preparation and study of every detail affecting, or in any way controlling the existence of the forest to which the working plan about to be made, is applicable. Under these circumstances, important and necessary as general working plans are, they can only be framed gradually, according as circumstances will allow of the work being done with the means which are available for doing it.

Working plans.

64. Annual plans of operations are, however, submitted yearly by Divisional Forest officers, with their annual budget estimates; and which receive the sanction of the Conservator. But there has, hitherto, been a want of definition about these plans, and the absence of important details from some of them, render the plans of little value as permanent records; hence, it is not intended to reproduce in this report the annual plans of operations for the past year. The defects alluded to above, are now being corrected, and future annual plans of operations, submitted by Divisional Forest officers, will, it is hoped, be found far more perfect and complete in necessary details, than they have hitherto been.

Annual plans of operations.

The working for timber, in the Banjar valley forests, is regulated by a fixed plan, but which as yet only deals with the yield of sal timber. In pursuance of this plan, the annual safe yield from these forests has been fixed at 700 first class trees. During the year were felled 547 first class trees, which have been cut up into scantlings of various dimensions to meet the demands for sawn timber in the city of Jubbulpore. Felling was necessarily restricted, since a sufficient number of sawyers could not be obtained to cut up within the year, 700 first class trees, the number that was proposed to be felled in the year.

65. In future, it is proposed to sell the sal trees standing in the forest, and certain definite proposals in this respect have been made, and which are now before the Officiating Conservator, who will report more fully on the subject in a separate communication to be shortly submitted. Briefly, the proposals here alluded to have for their object a new departure, that is to say, to sell the trees after they have been selected and marked by the Forest Department, standing in the forest at a fixed sum as royalty per tree. Present offers which have been made, appear to show that purchasers are willing to give Rs. 12 per standing first class sal tree, and this rate per tree, the Deputy Conservator of Forests, Mandla, is now inclined to urge, should be accepted. There can be no conflict of opinion, as to the question of this being the right principle on which to work the Government forests, provided of course it does not, as it may in some cases, lead to direct loss to the State; hence it follows that the detailed management of timber operations should, as a rule, be left to private individuals to conduct. The Forest Department in these Provinces cannot, with the small staff at its disposal, and the enormous extent of forest areas which it has to control, as well as carry out the demarcation of several thousand miles of forest boundary which is still waiting for definition at its hands, afford to divert some of its strength to watching and controlling details which can have at the best no important bearing on the production of timber. Much as the Forest Department may have to do with the preservation and well being of the forests, placed under its care and management, the conduct of timber operations, pure and simple, are not quite legitimate duties for it to undertake, and this is more especially true when private agency is ready to come forth and relieve it of those duties. Circumstances in the past have compelled the department to take up the work and act as timber dealers in the interests of the public at large, who, without such assistance, would otherwise have suffered in not being provided with adequate supplies for its wants. Yet the position is one that is better suited for the private speculator than a public department to occupy, especially when that department has other and far more important duties to perform, and all of which lie well within its own legitimate spheres of action. It is the function of the farmer to

produce the corn, but it is the functions of the corn merchant and the miller together combined to distribute it, and bring it to a condition fit to be consumed by the community at large. It is, as it were, the farmer, who producing the corn were also to usurp the functions of the corn merchant and miller, as to hope that the Forest Department will do the retail work of private timber dealers. Hence it follows that whenever private enterprise can be induced to step in and take up the work of felling, cutting up, and the distribution and retail sale of timber, the Forest Department should at once retire from that position as being one that is no longer tenable by it.

CHAPTER III.

Protection and Improvement.

1.—*Establishments.*

66. The scale of officers of the superior staff, sanctioned for the Central Provinces and Berar, stands as follows :—

2 Conservators.	7 Assistant Conservators.
10 Deputy Conservators.	5 Sub-Assistant Conservators.

On 1st April 1884, the following officers of the above sanctioned staff were present in the Central Provinces :—

1 Officiating Conservator.	3 Assistant Conservators.
7 Deputy Conservators.	4 Sub-Assistant Conservators.

During the year, the following changes took place among the superior staff of officers of the Forest Department in the Central Provinces :—

(1.) Major J. C. Doveton, Conservator, proceeded on 16 months' furlough making over charge of the office of Conservator on 16th May 1883, to Mr. R. Thompson.

(2.) Mr. I. Macpherson, Deputy Conservator, retired on 11th March 1884.

(3.) Mr. R. Whittall. Deputy Conservator, returned from one year's furlough on 5th July 1883, and was deputed to Quetta on special duty from which he rejoined on 8th November 1883.

(4.) Mr. H. Moore, Assistant Conservator, proceeded on 18th months' furlough to Europe from 23rd May 1883.

The following officers were absent on privilege leave for the periods stated opposite their names:—

Mr. G. H. Foster, Deputy Conservator, 3 months, from 5th August 1883.

Mr. G. F. Taylor, Assistant Conservator, 2 months, from 10th August 1883.

The following Officers, of the superior staff, were promoted during the year.

Captain C. H. Losack, from 2nd to officiate in the 1st grade Deputy Conservator from 16th May 1883, and confirmed in that grade from 28th September 1883.

Mr. W. P. Thomas, from 4th to 3rd grade Deputy Conservator, from 11th March 1884.

Mr. H. B. Anthony, from 3rd to 2nd grade Assistant Conservator, from 26th May 1883.

Mr. Mahomed Ghouse, Probationer, to Sub-Assistant Conservator from 1st January 1884.

67. During the year Forest Ranger Mahadeo Rao Palnaitker, and Apprentice Narain Pershad, were deputed to attend the Dehra Forest school, the former to complete his second year's course, and the latter to begin his first year. Mahadeo Rao rejoined the Provinces on 19th January 1884, after having qualified for and obtained the Ranger's certificate, and gained the second place in the list of students who had obtained the highest marks at the final examination. From 1st April last this officer was promoted to the grade of Sub-Assistant Conservator of Forests.

68. The scale of subordinate executive and protective establishment sanctioned for these Provinces stood as follows :—

22 Forest Rangers.
41 Foresters including 2 apprentices at Rs. 40 each,
168 Forest guard including apprentices,

at a total cost of Rs. 46,224 per annum. In addition to this establishment, the following is the scale of the temporary establishment sanctioned for the year 1883-84, and which was employed on revenue collection and protective duties, and is therefore exclusive of establishment charged to timber works only—

	Number.
Forest Darogahs	12
Jamadars, Duffadars and Moharirs	127
Duffadars, Moharirs, and Chaprasis, drawing less pay than Rs. 15 per mensem	1,604

at the total yearly cost of Rs. 1,53,530.

At no period, during the year, was the above temporary establishment maintained at the full sanctioned strength, owing to qualified men not being easily obtained to fill existing vacancies.

69. The statement below shows the distribution of the subordinate executive and protective sanctioned establishment, both permanent and temporary, among the 1st and 2nd class reserved forests in these Provinces:—

	Division or District.	Permanent.				Temporary.			
		Forest rangers at Rs. 50—150.	Foresters at Rs. 15—40.	Forest guards at Rs. 6—12.	Total.	Darogahs at Rs. 40—60.	Jamadars Daffadars, Moharirs &c., at Rs. 15—39.	Duffadars, Moharirs, Chaprassis, &c. at Rs. 3—14.	Total.
1st Class Reserves.	Direction ...	1	1	7	9	...	...	...	...
	Mandla ...	2	8	39	49	...	...	...	..
	Hoshangabad ...	1	5	17	23	...	1	44	45
	Betul ...	1	2	10	13	...	1	8	9
	Nimar ...	1	5	18	24	...	9	48	57
	Chanda ...	2	4	16	22	...	...	44	44
	Seoni ...	3	4	23	30	...	2	23	25
	Saugor ...	...	3	11	14	...	...	10	10
	Wardha ...	...	3	6	9	...	..	...	...
	Unappropriated posts ...	...	2	3	5	...	...	...	...
	Total ...	11	37	150	198	...	13	177	190
2nd Class Reserves.	Nagpur ...	1	...	1	2	...	3	105	108
	Bhandara ...	...	...	...	...	1	4	66	71
	Chanda ...	1	1	8	10	1	12	131	144
	Wardha ...	1	...	1	2	...	3	57	60
	Balaghat ...	1	...	1	2	1	5	93	99
	Jubbulpore ...	1	...	1	2	...	6	30	36
	Saugor ..	...	...	1	1	1	11	122	134
	Damoh ...	1	...	1	2	...	7	130	137
	Mandla ...	1	...	1	2	...	13	105	118
	Seoni ...	1	...	1	2	...	4	76	80
	Betul ...	...	...	...	...	1	7	60	68
	Chhindwara ...	...	...	...	...	1	5	77	83
	Hoshangabad ...	1	1	...	2	...	7	117	124
	Narsinghpur ...	...	...	1	1	1	1	27	29
	Nimar ...	1	2	...	3	1	9	61	71
	Raipur ...	1	...	1	2	2	12	75	89
	Sambalpur ...	...	...	...	...	1	3	49	53
	Bilaspur ...	...	...	...	...	1	2	46	49
	Total ...	11	4	18	33	12	114	1,427	1,553
	Grand Total ...	22	41	168	231	12	127	1,604	1,743

70. The statement herein following is meant to give a general idea of Forest organization in these Provinces by exhibiting in square miles of forest area, the average size of each Forest administrative and executive charge as it stood during the year under review.

Division.	Area in square miles of Reserved forests.			Superior staff.		Subordinate executive and protective establishment.												Average area in square miles supervised per man of each grade of the subordinate establishment.			Remarks.
						Permanent.				Temporary.				Total permanent and temporary.							
	1st Class.	2nd Class.	Total.	Number	Designation.	Rangers.	Foresters.	Forest guards.	Total.	Darogahs.	Jamadars, &c.	Chaprasis, &c	Total.	Rangers and Darogahs.	Foresters and Jamadars.	Forest guards and chaprasis.	Total.	Rangers and Darogahs.	Foresters and Jamadar	Forest guards and chaprasis.	
Direction	9	...	9	1	.....	1	1	7	9	...	...	...	...	1	1	7	9	9·00	9 00	1·28	
Mandla	359		359	1	Deputy Conservator ...	2	8	39	49	..	...	...	...	2	8	39	49	179·50	44·87	9 20	
				2	Sub-Assistant Conservator ..																
Hoshangabad	466	1,185	1,651	1	Deputy Conservator ...	2	6	17	25	.	8	161	169	2	14	178	194	825 50	117 92	9 28	
Betul	287	852	1,139	1	Do. ..	1	2	10	13	1	8	68	77	2	10	78	90	569 50	113·90	14 60	
Nimar	1,348	716	2,064	1	Do. ..	2	7	18	27	1	18	109	128	3	25	127	155	688·00	82 56	16·25	
				1	Assistant Conservator ..																
				1	Sub Assistant Conservator ...																
Chanda	391	2,977	3,368	1	Deputy Conservator .	3	5	24	32	1	12	175	188	4	17	199	220	842 00	198 12	16 92	
				1	Assistant Conservator ...																
Seoni	468	750	1,218	1	Deputy Conservator .	4	4	24	32	..	6	99	105	4	10	123	137	304 50	121·80	9·90	
Saugor	66	741	807	1	Do. ..	...	3	12	15	1	11	132	144	1	14	144	159	807·00	57·64	5·60	
Nagpur	.	398	398	1	Assistant Conservator ..	1	.	1	2	..	3	105	108	1	3	106	110	398·00	132·66	3 75	
Wardha	41		41	1	Sub-Assistant Conservator ...	..	3	6	9	.	...	..	...		3	6	9		13·66	6·83	
Total ..	3,435	7,619	11,054	14	.....	16	39	158	213	4	60	849	919	20	105	1,007	1,132	552 70	103 28	10·98	
Bhandara ..	...	551	551	1	Deputy Commissioner ..	..	..	..	...	1	4	66	71	1	4	66	71	551·00	137 75	8·35	A Forest officer was appointed just before close of the year.
Balaghat .	..	1,035	1,035	1	Do. ..	1	..	1	2	1	5	93	99	2	5	94	101	517 50	207 00	11 01	
Jubbulpore ..	...	321	321	1	Do. ..	1	...	1	2		6	30	36	1	6	31	38	321·00	53 50	10 35	
Damoh ..	...	857	857	1	Do. ..	1	..	1	2	..	7	130	137	1	7	131	139	857 00	122 43	6 64	
Mandla	...	2,188	2,188	1	Do. .	1	..	1	2	..	13	105	118	1	13	106	120	2188 00	168 31	20 64	
Chhindwara ..	..	649	649	1	Do. ..	-	...	—	.	1	5	77	83	1	5	77	83	649·00	129·80	8 44	A Forest officer has been appointed since close of the year.
Narsinghpur ..	...	193	193	1	Do. ..		...	1	1	1	1	27	29	1	1	28	30	193 00	193 00	6·89	
Raipur ...	..	1,377	1,377	1	Do. ..	1	...	1	2	2	12	75	89	3	12	76	91	459·00	114 75	18 12	
Sambalpur ...	...	715	715	1	Do. ..		..	...	...	1	3	49	53	1	3	49	53	715·00	238 33	14 59	
Bilaspur	...	649	649	1	Do. ..	..	..		..	1	2	46	49	1	2	46	49	649·00	324·50	14 11	
Wardha	...	159	159	1	Do .	1	.	2	1	...	3	57	60	1	3	58	62	159 00	53·00	2·74	A Forest officer is posted to this district to aid Deputy Commissioner.
Total	...	8,694	8,694	11	.....	6		13	7	8	61	755	824	14	61	762	837	621·00	142 52	11 41	
Grand Total	3,435	16,313	19,748		.....	22	39	226	165	12	127	1,604	1,743	34	166	1,769	1,969	580·82	180·96	11 16	

The distribution of the forest establishments, as exhibited in the above statement, has been regulated by the actual practical wants of each district and forest division, and which had to be met by the limited establishments at the disposal of the Forest department; hence the very great variations presented by the figures showing the average forest areas which appears by the statement as allotted to each grade of officer. The following general averages which have been struck may be interesting :—

	Square miles.
Average area supervised by each Gazetted Forest Officer ...	850·031
Average area administered by each Divisional Forest Officer...	1105·40
Average area administered by each Deputy Commissioner ...	790·36

2.—General protection and breaches of Forest Law.

General protection.

71. The general prohibitive and protective measures reported last year still prevail as regards the several 1st and 2nd class forest reserves, which are closed to all cutting. In Balaghat the area of 2nd class reserves, placed under restrictive measures, is now a little more than 276 square miles in extent. These forests occupy the ghats and valleys of the upland portions of north-western Balaghat, and as occupying that position the restrictions imposed on cutting timber in them cause little or no inconvenience to be felt by the people residing at the foot of the ghats, who, at the same time it must be said, are provided with other forests from which to draw their supplies, and are thus, in a measure, independent of the upland forests which are practically closed to all cutting. In the Jubbulpore district, 8 blocks of 2nd class reserves, comprising an area of 10,526 acres, situated within a few miles of Jubbulpore, were, sometime ago, specially closed against cutting of any kind. To this area have been added, during the year, 15 additional blocks of forest with an aggregate area of 27,270 acres, with a view to improving the condition of the forests, which have decidedly been much over cut, and which now certainly require to be closed for several years before it is possible that they can recover themselves. Grazing within these closed areas is, however, still permitted on annual licenses being taken out for it. In the Saugor division the 2nd class reserves are worked on a system of periodically open and closed blocks. This scheme has worked, so far, well, and with a considerable amount of good accruing to the annual forest growth in the closed blocks. From Damoh, it is reported that 7 forest blocks, aggregating 5,669 acres, have been closed against all felling and that in the open forests, timber, of the reserved kinds of trees, cannot be felled except through departmental agency. Some of the 2nd class reserves, in the Seoni district, are also worked on the Saugor system of open and closed blocks. This system must not, however, be mistaken for a general working plan for these forests. The system in force has none of the essential features of a general working plan, except in so far resembling the latter, that it regulates the periodical opening and closing of certain forests to the public. Roughly it has answered very well, but that the time has undoubtedly arrived for some of the more important 2nd class reserves to be managed on a more rational basis than has hitherto obtained, cannot be denied. From Chhindwara the Deputy Commissioner reports, that, in addition to the 18 forest blocks closed in previous years and which together have an aggregate area of 14,362 acres, he has added to these closed blocks during the year 18 other blocks that are situated both above and below the ghats, and which between them have a total area of 35,237 acres. These closed forests have now been reserved from fellings of any kind, though grazing is still permitted, and only excluded from 17 out of the 36 blocks which now stand closed to all cutting. The area closed to grazing is equal to 29,071 acres.

72. During the year the following has been done in respect of closing forests to cutting in the Narsinghpur district. The forests detailed below have been closed, so far as felling of the reserved kinds of trees are concerned, from 8th November 1883.

Rajgarh	Gourchapur.
Alhanpur.	Bharikho.
Bhourpani.	Chawurpata.

The aggregate area of the above forests is 2,950 acres.

The forests detailed under were also closed from 5th January 1884, viz:—

Pathomati, Ranikachar, Makunda, Nandkote, and part of Salay chouka, with an area of 7,300 acres The total forest area closed to felling of any of the reserved species in the 2nd class reserves of Narsinghpur is therefore 10,250 acres. The Deputy Commissioner would like to close these forests altogether against trees of any kind being felled, and thinks, if this could be done, the rest, thus given to the forests, would enable them to recover themselves, but, in proposing this measure he is at once confronted with the difficulties of providing for the immediate recurring wants of the residents of his district who draw their supplies from these forests. This fact, alone, is an indication if other proof were wanting, that a method of managing the 2nd class forests, different from the existing one, is now urgently required in districts situated as Narsinghpur is as regards readily accessible forests, from which the people can draw their supplies, or else have to go to greater distances for such supplies.

73. The 2nd class reserves, in the Sambalpur district, detailed belowl remained closed during the year to all cutting—

		Areas.
Lachmi Dongri	...	960
Burha Raja	...	320
Moti Jhirrun	...	320
Total	...	1,600

The following forest blocks were closed during the year—

		Acres.
Lamba Dongri	...	2,720
Chandli Dongri	...	5,120
Burhanpura	...	640
Total	...	8,480

The total forest area now closed to all felling in Sambalpur aggregates 10,080 acres.

74. The following statement shows the areas, and percentages to tota areas of 2nd class reserves which are now closely protected against all felling:—

District.		Area of 2nd class reserves.	Area closed to felling	Persentage of closed area to total area of reserves.	Remarks.
Balaghat	...	6,08,089	1,76,640	29·05	
Jubbulpore	...	2,05,190	37,796	18·42	
Damoh	...	5,34,743	5,669	1·06	
Chhindwara	...	4,10,412	49,599	12·09	
Narsinghpur	...	1,23,712	10,250	8 28	Closed only to reserved kinds of trees.
Sambalpur	...	4,57,600	10,080	2·20	

75. The closed forests in Wardha having been transferred to the 1st class reserves, nothing further need be said about them here.

Offences committed by Forest Establishment.

76. No offence was reported, during the year, as having been committed by any member in the superior grades of the subordinate forest establishment; and with but one exception, the bulk of the offenders have been men who were in receipt of small pay, such as Duffadars, Moharirs, Forest and fireguards, &c., and who, as a rule, belonged to the temporary establishment. The total number of offen-

ces reported, during the year, against the Forest staff was 255, towards which number the permanent and temporary establishments contributed in the following proportion :—

Permanent inferior establishment ... 44 offences.
Temporary inferior establishment ... 211 offences.

The only offences of a grave nature and for which the offenders were prosecuted before a Magistrate were 6 cases, resulting in convictions in 5, and discharge of the offenders in the sixth case. The following is a brief notice of these offences.

77. In the Hoshangabad division, a chaprasi, on the temporary establishment, was tried summarily by the Deputy Commissioner, charged under Section 176, Indian Penal Code, for not giving information to the Police of a raid made by Tantia dacoit on a village situated near the place where this chaprasi was posted as a forest guard. The Magistrate convicted the chaprasi and sentenced him to three months' imprisonment; which sentence, however, on appeal was squashed, on the ground that there was nothing to show that an offence, to support conviction under Section 176, Indian Penal Code, had really been committed.

78. Two cases are reported from the Betul division, in which criminal prosecutions were resorted to. In one case, a duffadar, on the temporary establishment, was convicted on two counts of misappropriating Government money, and was sentenced to pay a fine of Rs. 50, and to suffer 7 weeks' imprisonment. In the other case, a chaprasi, also of the temporary establishment, was found guilty of taking bribes, and was sentenced to one year's imprisonment and a fine of Rs. 15.

79. A case is reported from the Nimar division, of a temporary clerk employed in the Divisional Office, to whom a working cash balance had been entrusted while he accompanied the Divisional Forest Officer into camp, but who embezzled the money while it was still in his trust. The case was prosecuted before a Magistrate, and the offender convicted and sentenced to one year's rigorous imprisonment with fine. The cash balance embezzled amounted to the sum of Rs. 96-9-0.

80. A case of cheating is reported from the Jubbulpore district, in which two chaprasis, of the temporary establishment, were concerned; in this case, one offender was tried, convicted, and sentenced under Section 417, Indian Penal Code, to three months' rigorous imprisonment, while the other offender absconded before the trial had commenced.

81. From Raipur it is reported that two chaprasis of the temporary establishment entrusted with forest collections, amounting to a sum of Rs. 289 0-3, which they were charged to carry to the Treasury, left the bag, containing the money, with some of their clothes lying on the edge of a nala, while they themselves went into the nala to bathe, cook and eat their food. On their return they discovered that the bag was gone without being informed of any clue as to who had taken it. They were both placed on their trial before a Magistrate, but, as there was no evidence to show that a fraud had been attempted, they were discharged. The men were, however, subsequently dismissed the service for culpable neglect of duty.

82. The other offences reported, and which had been dealt with departmentally, relate to such venial faults as simple neglect of duty, or disobedience of orders, failure in rendering returns and accounts by prescribed dates, and absence from duty without leave.

The punishments awarded in these cases consisted of fines, suspensions for short periods, reductions to a lower grade, and, in the more serious and flagrant cases, to the removal of the offenders from the service. The following abstract shows the number and nature of punishments awarded during the year. As this is the first time this return appears in the Annual Forest Administration Report, there are no figures for previous years available with which they could be compared.

| Division. | Number and nature of punishments. | | |

In addition to the offences committed by the departmental staff, and which have been briefly reviewed, the following has been reported regarding loss of forest revenue from 2nd class reserves, whilst it was still in the custody of the police.

83. In the Chanda division a discovery was made, in the early part of the year, that the Head Constable, in charge of the Chanda head-quarters police station house, had, for some time past, been systematically falsifying his books with the view to misappropriating the forest revenue passing through his hands, from out-station Police posts, for payment into the Government treasury. An examination of his books showed that the greater portion of the forest collections received by him from January 1882, had been misappropriated, and, also, that the value of certain forest license Tickets, with which the Chief Constable of Chanda had entrusted him for distribution to out-posts, had been received and misappropriated by him. On these facts being discovered by the Divisional Forest Officer, the latter there and then caused the Head Constable to be brought before a Magistrate, with the intention of having his statement recorded; but before the Magistrate could record all what the man had to say, and all that he had said amounted to a confession of his crimes, he had to be removed to hospital because he was dying from having previous to his appearance before the Magistrate, poisoned himself with a dose of arsenic; shortly after his removal to hospital the man died. The défalcations in this case amount to the following sums:—

	Rs.	A.	P.
Remittances from Out-posts on account of sales of Forest produce on License ...	722	3	9
Value of Forest license Tickets now unaccounted for ...	367	11	6½
Total ...	1,089	15	3½

A separate report, regarding these defalcations, has not yet been submitted for the information and orders of the Chief Commissioner, because the final report, on the enquiry held by Mr. Macpherson, Deputy Conservator, whilst that Officer was in charge of the Division, has not, up to date, been received in this Office; though it has been asserted that the report was duly forwarded to the Deputy Commissioner, through whom it should have reached the Conservator. What has become of Mr. Macpherson's report it is now impossible to say, but so much is certain, that the Office copy of the report, which was filed in the Forest Divisional Office, has been secured along with all the other papers and proceedings in the case. These, with a full report on all the circumstances attending these serious frauds, will, shortly, be laid before the Chief Commissioner for information and orders; meanwhile it is only necessary to note the fact of the occurrence of the frauds in this report.

84. A second case of loss of forest revenue has been reported from Betul. Briefly, the particulars of this case are as follows:—

A sum of Rs. 889-7-6 was brought by the Police to the station house Badnur where it was detained owing to the Christmas holidays, and the treasury in consequence being closed. Whilst this money was still in the custody of the Police, the bag containing it was stolen, or caused, in some way, to disappear. The amount of forest revenue involved in this case was Rs. 201-0-6, which was recovered from the Police Moharir, who was responsible for it, and paid into the treasury; but the Deputy Commissioner has, since then, applied for a refund of the money, on the ground that it had been ruled by the Inspector General of Police, that the District Superintendent of Police, who enquired into and decided the case against the Police Moharir, had exceeded his powers. The application for this refund is now before the Chief Commissioner for orders.

Forest Offences.

85. The figures given in the following abstract statement compare the number and kinds of forest offences for the past two years:—

	1st Class reserves.			2nd Class reserves.			Total.		
	Number of cases.		Difference.	Number of cases.		Difference.	Number of cases.		Difference.
	1882-83.	1883-84.		1882-83.	1883-84.		1882-83.	1883-84.	
I.—Offences in which prosecutions were resorted to in a Magistrate's Court.									
Pending cases at the commencement of the year ...	1	...	—1	...	2	+2	1	2	+1
Injury to forest by fire	5	6	+1	3	8	+5	8	14	+6
Unauthorized felling, &c., ...	17	4	—13	513	272	—241	530	276	—254
Grazing without permission	5	...	—5	78	34	—44	83	34	—49
Other offences.	3	...	—3	11	17	+6	14	17	+3
Total ...	31	10	—21	605	333	—272	636	343	—293
II.—Offences classed as compoundable under Section 67 of the Forest Act.									
Pending cases at the commencement of the year ...	...	3	+3	...	...	...	...	3	+3
Injury to Forest by fire	2	6	+4	...	3	+3	2	9	+7
Unauthorized felling &c.	130	132	+2	4,364	6,645	+2,281	4,494	6,777	+2,283
Grazing without permission	318	305	—13	4,208	2,747	—1,461	4,526	3,052	—1,474
Other offences	17	4	—13	53	8	—45	70	12	—58
Total ...	467	450	—7	8,625	9,403	+778	9,092	9,853	+761
Grand Total ...	498	460	—38	9,230	9,736	+506	9,728	10,196	+468

86. And the statement below shows how these offences were disposed of as compared with the year 1882-83.

How disposed of.	1st Class reserves.						2nd Class reserves.						Total.						Remarks.
	1882-83.		1883-84.		Difference.		1882-83.		1883-84.		Difference.		1882-83.		1883-84.		Difference.		
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Total cases prosecuted ...	31	57	10	36	—21	—21	605	1,228	333	872	—272	—356	636	1,285	343	908	—293	—377	
Convictions obtained ...	26	59	7	25	—19	—28	523	993	275	648	—248	—345	549	1,046	282	673	—267	—373	
Discharged ...	4	4	3	11	—1	+7	80	235	58	224	—22	—11	84	239	61	235	—23	—4	
Pending ...	1	...	...	...	—1	...	2	...	...	...	— 2	...	3	...	...	...	—3	...	
Cases compounded ...	467	880	423	976	—44	+96	8,454	16,791	8,687	15,352	+233	—1,439	8,921	17,671	9,110	16,328	+189	—1,34[illegible]	
Cases discharged ..	...	...	7	11	...	...	171	...	70	110	...	...	171	...	77	121	...	...	
Cases pending ...	...	...	17	26	...	...	...	...	619	906	...	..	...	...	636	932	...	...	
Undetected ...	...	...	3	...	...	...	...	...	27	...	...	...	...	...	30	...	...	...	
Total ..	467	880	450	1,013	—17	+133	8,625	16,791	9,403	16,368	+778	—423	9,092	17,671	99,853	17,381	+761	—29[illegible]	
Grand Total ..	498	937	460	1,049	—38	+112	9,230	18,019	9,736	17,240	+506	—1,179	9,728	18,956	10,196	18,28	+46[illegible]	—667	

87. In the 1st class reserves there were reported 460 cases involving 1,049 persons, as against 498 cases reported in the previous year. The cases for 1883-84 are classified as follows:—

1st class reserves.

		Cases.	Persons.
Prosecuted	...	10	36
Compounded	...	423	976
Discharged	...	7	11
Pending at close of the year	...	17	26
Offenders undetected	...	3	0
Total	...	460	1,049

The result of cases prosecuted was, that convictions in 7 involving 25 persons were obtained, while 3 implicating 11 persons were discharged for want of sufficient evidence to support convictions.

88. From returns submitted for the 2nd class reserves, it would appear that there were 9,736 cases reported, involving 17,240 persons. Compared with the number of cases reported for the year previous, the number for 1883-84 is more by 506 cases and less by 779 persons implicated. This is clear from the figures given below:—

2nd class reserves.

Year.		No. of cases.	No. of persons.
1882-83	...	9,230	18,019
1883-84	...	9,736	17,240
		+ 506	—779

There has been a general decrease in the number of cases in almost all 2nd class reserves, with the exception of Sambalpur, in which the number of cases in which the persons concerned compounded is 4,445 as against 2,094 in the previous year.

This abnormal increase is explained by the Deputy Commissioner as due to the resistance induced by certain orders issued by his predecessor, in anticipation of a revised scheme of forest management which he hoped would shortly have been sanctioned and brought into action. The resistance, here alluded to, amounted to this, that the people refused to refrain from helping themselves to forest produce under the terms of the old scheme, although they were warned not to do so. In fact the acts of these people can scarcely be called serious forest offences, and as such, were rightly disposed of by acceptance of enhanced rates as compensation.

89. The cases reported for 1883-84 are classified as follows:—

		No. of cases.	No. of persons.
Prosecuted	...	333	872
Compounded	...	8,687	15,352
Discharged	...	70	110
Pending at close of the year	...	619	906
Offenders not detected	...	27	...
Total	...	9,736	17,240

Of the 333 prosecutions, 275 were successfully convicted, including 648 persons. In the remaining 58 cases, involving 224 persons, prosecutions failed either for want of proper evidence, or that the parties to the offences were not rightly identified in the first instance.

Taking together the offences which were of sufficient importance to warrant prosecution of the offenders, reported from both 1st and 2nd class reserves, we have the following figures for the year 1883-84 :—

	No.	Persons.
Offences prosecuted ...	343	908
with the following results :—		
Convictions obtained ...	282	673
Discharged for want of proof...	61	235

The percentage of convictions to prosecutions is therefore cases 82·2 as against 86 7 for the previous year. The decrease in the year, in respect of cases successfully prosecuted, shows that less judgment was exercised in referring cases to the Criminal Courts, than characterized the proceedings of forest officers during the year previous. Still it is satisfactory that even so high a percentage as 82·2 was secured. Probably, with advancing years, the difficulties in successfully prosecuting forest cases will increase with the increasing intelligence of that class of the population from which the culprits, involved in these cases, are principally recruited.

90. In Form No. 52, attached to this report, the classified details of cases prosecuted in the several Forest Divisions and Districts will be found; and in Form 52 A similar information to the above regarding offences *compounded* during the year, will also be found. As these two statements contain all the details in respect of offences committed, it appears no longer necessary to repeat them in the body of the Annual report, from which they have, accordingly, for that reason been omitted.

The following remarks relate to some of the more serious offences committed during the year :—

91. In the 1st class reserves. The Deputy Conservator of Forests, Mandla, reports that a party consisting of 20 men entered the Jagmundal closed reserve with the view to hunt deer. That as the dry season was then far advanced, there was thus danger that the men might have fired the forest by accident; they were accordingly arrested, and in order to evade further proceedings being taken against them, they entered into a composition with the Divisional officer. From Hoshangabad is reported the capture and punishment of an offender, whose offence dates as far back as the year 1880 This individual personated a Government Contractor, and thus induced certain *Gonds* to deliver up to him 80 seers of lac which the latter had collected, from the 1st class reserves, for the Forest Department. The offender, after successfully evading the police for a considerable period of time, was finally captured last year by one of the Foresters in charge of a 1st class reserve; the offender was tried, convicted, and sentenced to six months' imprisonment.

In the Bowargarh 1st class reserve, Betul district, one offender, who was detected in maliciously setting fire to the forest was, on conviction, fined Rs. 5 by the Magistrate. In another similar case of fire, which occurred in the Khamapur 1st class reserve, the offenders, on conviction before a Magistrate, were punished, 2 with 5 months imprisonment, and 4 with fines amounting to Re. 1 each. Unauthorized felling of teak has also been reported from this reserve. 14 men implicated in this case were punished by fine only, amounting to Rs. 197-8. It is, however, now strongly suspected that more teak is cut and surreptitiously removed from this forest than is regarded as possible, though how far the local forest establishment is concerned in allowing theft of the wood it is as yet difficult to say. There is scarcely a

doubt that a large quantity of freshly cut teak wood finds its way across the Berar frontier through Melghat, and it is hoped that the Divisional officer will now satisfy himself that none of this wood is taken out of his forests clandestinely. Separate instructions will, however, be issued on this subject for the guidance of this officer.

The foregoing are the only cases of any note that have occurred in relation to the 1st class reserves. In the case of 2nd class reserves the following deserve to be noticed.

92. From Nagpur are reported two cases in which unauthorized felling of teak is involved. Both cases were prosecuted with the result that rupees 15 and rupees 60 respectively were levied as fines from the offenders.

Several cases of unauthorized felling of reserved trees, and with having timber in possession illicitly obtained, have occurred and been prosecuted in the Chanda Division. In two cases the punishments inflicted separately on each of the principal offenders, were rupees 50 fine and 15 days' imprisonment; in a second case a fine of rupees 20 was inflicted; and in the Sironcha Sub-division, no less than 31 similar cases were brought to light, in which 88 persons were implicated; the punishments in these cases took the form of fines levied from the offenders ranging in amount from annas 4 to rupees 6 each. In only two cases was sentence of imprisonment awarded; in one case 4 men were punished with one month each, and in the other case the offender was sentenced to three months' rigorous imprisonment.

From Nimar is reported an attempt at removal of boundary marks, and consequent alteration of the boundary of a Government forest. This case was prosecuted, the offenders being a Malguzar and his agent. The case, however, fell through for want of evidence to prove who were the actual culprits, though, *prima facie*, the persons in whose interests the fraud was attempted, were doubtless also the real offenders.

The Deputy Commissioner of Narsinghpur has only two offences to report from the second class reserves in his district; both of which were prosecuted and convictions obtained for each under Section 25, and Rule 3 made under Section 41.

From Bilaspur the Deputy Commissioner reports that 24 cases involving 45 persons were prosecuted, and that against 23 cases and 41 persons, convictions were obtained under Section 32 of the Forest Act (VII of 1878). There appears to be a mistake here, because the section of the law under which it is said these convictions were obtained applies only to Protected Forests constituted under Chapter IV of the Act. In these Provinces there are no Protected Forests so constituted under that Chapter of the Act, and hence there could have been no offences committed under its provisions.

3.—Forest Fires.

93. The areas under protection from fire last year were :—

			Acres.
1st class reserves	...	...	868,273
2nd class reserves	...	...	44,654
		Total ...	912,927

But, during the dry season of 1883-84, the area of 1st class reserves was increased by the transfer to that class of several 2nd class reserves, which were also at the time under protection from fire. Therefore, the relative areas of these two classes of reserves, as they now stand, will be seen by the following abstract :—

			Acres.
First Class	...	...	906,701
Second Class	...	...	7,702
		Total ...	914,403

The difference in excess area, namely 1,249 acres, is explained thus

	Acres.
Additional area taken under protection which now includes the whole of the Lower Gour first class reserve in the Mandla Division ...	3,517
Additional area under protection in the Moharli first class reserve, Chanda Division ...	1,280
Total ...	4,797
	Acres.
Deduct area excluded from protection. Namely the Kantra-nala first class reserve in the Raipur district	3,548
Net increase in the area protected ...	1,249

The whole of the Lower Gour forest was protected from fire during the past dry season, and it is now intended that this protection shall be made permanent, because of the very great importance of this reserve, as a source of future supply for the city of Jubbulpore. In the Moharli reserve advantage was taken of some of the natural features which form the boundary of the "Pipulkoota" block, to help to exclude fire from it; and as this plan has been successfully carried out for some years, there is now no longer any object in keeping this area excluded from the total areas under permanent protection from fire as has hitherto been done, because attempted protection, in this case, was, in the earlier stages, but an experiment.

The Kuntra-nala reserve, in the Raipur district, has now been excluded from the list of reserves under permanent protection. Because year after year the record has been failure; there is no revenue, at present, derived from this reserve, nor has it been found possible to post a forester to take special charge of it, consequently the measures taken during the past few years, to keep fire out of this forest, have resulted in failure for the simple want of proper supervision; and hence it has been decided not to spend any more money in attempting to keep fires out until the reserve can be properly managed by an experienced forester. At present this reserve is closed to all cutting or grazing, and the nominal charge of it rests with the forest ranger of the "Hathibari" reserve, which is situated in Sonakhan, in the Bilaspur district.

94. The following figures contrast the results obtained by attempted protection during the past two seasons.—

			Acres.
Attempted 1882-83	...	...	912,927
Failed	...	...	22,257
Actually protected	...	...	889,970
Attempted 1883-84	...	...	914,403
Failed	...	...	39,995
Actually protected	...	...	874,408

Area actually protected in 1882-83 cost—

Per square mile	...	...Rs. 11-3-1
Per acre	...	...Pies 3·359

Area actually protected in 1883-84 cost—

Per square mile	...	...Rs. 12-8-8
Per acre	...	...Pies 3 763

95. The Statement below is a summary of the several forest areas actually protected from fire during the dry season of 1883-84, contrasted with similar results obtained during the previous season.

Division.	Area in Acres.						Cost of area actually protected.					
	Under protection.		Failures.		Actually protected.		Total.		Per Square Mile.		Per Acre.	
	1882-83	1883-84.	1882 83.	1883-84	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84	1882-83.	1883-34.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Pies.	Pies.
1st CLASS RESERVES.												
Direction	5,671	2,123	2,883	...	2,788	2,123	156 9 0	71 5 2	35 14 11	21 8 0	10·780	6·450
Mandla	116,364	120,108	1,756	227	114,608	119,881	2,268 11 9	2,596 15 10	12 10 8	13 13 9	3·800	4·159
Hoshangabad	220,480	220,480	1,526	970	218,954	219,510	1,964 6 0	3,870 8 10	5 11 10	11 4 6	1·723	3·385
Betul	54,720	54,720	1,558	1,120	53,162	53,600	1,051 6 9	1,169 13 11	12 10 6	13 15 6	3·797	4·191
Nimar	262,150	262,150	6,166	32,289	255,984	229,861	2,692 11 11	2,382 7 9	6 11 8	6 10 1	2·020	1·990
Chanda	60,325	61,605	320	18	60,005	61,587	4,374 4 6	3,914 8 4	49 10 6	40 10 10	13 997	12 204
Seoni	140,770	140,770	...	640	140,770	140.130	1,994 7 4	1,993 8 8	9 1 0	9 1 7	2·720	2·731
Saugor	18,663	18,663	90	827	18,573	17,836	365 8 0	445 13 1	12 9 5	15 15 11	3·778	4 799
Wardha	26,082	26,082	8,300	3,900	17,782	22,182	531 12 9	584 2 5	19 2 2	16 13 7	5·742	5·056
Total ...	905,225	906,701	22,599	39,991	882,626	866,710	15,399 14 0	17,029 3	11 2 8	12 9 2	3·350	3·772
2nd CLASS RESERVES.												
Saugor	2,885	2,885	...	...	2,825	2,885	116 13 10	40 5 0	24 14 9	8 15 1	7·777	2·683
Balaghat	4,817	4,817	360	4	4,457	4,813	55 1 3	68 1 5	7 14 6	9 0 10	2·372	2·716
Total ...	7,702	7,702	360	4	7,342	7,698	171 15 1	108 6 5	14 15 3	9 0 2	4 496	2·701
Grind Total ...	912,927	914,403	22,959	39,995	889,968	874,408	15,571 13 1	17,137 9 8	11 3 1	12 8 8	3·359	3 763

96. During the year 28 fires were reported as having broken out in forest areas under protection :—

Division.		Number of fires.	Area over which fire passed. Acres.
1st Class, Mandla	...	... 4	227
" Hoshangabad	...	... 6	970
" Betul	...	... 3	1,120
" Nimar	...	... 8	32,289
" Chanda	...	... 1	13
" Seoni	...	... 1	640
" Saugor	...	... 2	827
" Wardha	...	... 2	3,900
2nd Class, Balaghat	...	... 1	4
		28	39,995

The season's fires which require any detailed notice in this report are the following :—

97. A series of extensive fires is reported as having passed over the Chandgarh reserve, in the Nimar Division. There was a succession of these fires following quickly on one another, until about one-half of the protected area had been invaded by it. The Divisional Officer reports that the fires were lighted by a gang of dacoits who were in the Chandgarh reserve at the time, and that in all probability, these men set fire to the forest, in order to revenge themselves for an attack, which had been made on the gang last December, by the Police and some Forest officials combined together, who ran in and fired into the gang after it had moved off some distance into the forest with spoil taken from a village situated within the boundaries of the reserve. The Police, who were subsequently directed to make local enquiries as to the origin of these fires, declared them to have been lighted by the forest subordinates themselves, in order, it is said, to spite one another or to involve one another in trouble and disgrace. The District Superintendent of Police, in forwarding this report of the Police enquiry, said that he thought the Police had taken and expressed altogether a one sided view of the whole matter, and he therefore suggested that a regular enquiry should now be held before an officer appointed by the Deputy Commissioner. This suggestion has been acted upon, but the results of this latest enquiry have not yet been made known. But for these extensive fires in the Nimar Division, which passed over an area that is larger than the total failures in all other reserves, the results of attempts to keep fires out of protected forests during the past dry season would have shown great improvement on the results obtained in the previous year. This will be seen by the following statement :—

The failures this year amounted to	...	39,995 acres.
The total failures last year amounted to	...	22,959 "
Against this year, more	...	17,036 acres.

Now if we compare the failures in the Nimar Division during these two years, we shall find that Nimar has contributed more towards failures in this year than all the other Forest Divisions put together have—

Failures in Nimar this year	...	32,289 acres.
Do. in last year	...	6,166 "
More in this year	...	26,123 acres.

as against 7,706 acres, the total area failed this year in all other Divisions. If the total failures of the year be represented by 100, then Nimar has contributed more than 81 towards it as against less than 19 the share contributed by all the other Divisions put together. Whatever the causes be,—and they must be of a nature all more or less controlable,—which are at work in the Nimar Division in baffling the attempts of the local officers to keep fire out of the Chandgarh reserve, one thing is very clear, that the results of the attempts made in the past dry season are extremely unsatisfactory.

98. In the Hoshangabad Division, in a manner almost similar to that reported from Nimar, a series of fires occurred in a single forest, by which no less an area than 960 acres was passed over by the fire. No sooner was one fire got under, then, after a day or two, another was started in its place ; and so

on until the original fire had repeated itself no less than four times. The results of enquiries which have hitherto been made in investigating the origin of these fires, point very clearly to the fact of gross carelessness on the part of some of the local forest establishment, who failed in extinguishing some burning logs of wood after the fire had set them alight, and which, doubtless, were the cause of the forest fire repeating itself several times. The Deputy Conservator has been directed to make a formal and searching enquiry into this matter, and to punish the offenders to the full extent of his powers. The results of the action taken by this officer, on the instructions issued to him from this office, have not yet been reported.

99. Three fires were lighted in the Bowergurh protected reserve in the Betul Division, all of which have been clearly traced to the action of incendiaries. In one instance, as has already been stated, the offender was caught and convicted, and was punished by the Magistrate to pay a fine of Rs. 5. In the other two cases, evidence sufficient to convict the offenders was not forthcoming, although the offenders themselves are well known to the members of the local forest establishment.

100. From the Wardha Division, two fires are reported as having passed over an area of 3,900 acrss. One of these two fires has been traced to a burning log of wood which had been overlooked by the fireguards at the time of making their fire traces. These men were punished. In the case of the other and larger fire all efforts at discovering its origin have failed, although a Police enquiry was instituted. It is, however, suspected that it was lighted by one of many disaffected persons among the residents of a village, who are hostile to any attempt being made to protect, from fire, the forest in their immediate neighbourhood; because such protection involves the exclusion of their cattle from finding grazing in such forest.

101. A fire, which succeeded in passing over 18 acres of forest, is reported from the Chanda Division. This fire has, to all appearances, been successfully traced to the action of lightning, which discharged itself during a thunder storm into a tree standing on the highest point of the Bhimarum hill, and passing thence down the tree, the electric current was traced to the spot where a heap of dry rubbish had been lying at the foot of the tree. The kindling of this rubbish is said to have given rise to the fire which spread into the forest.

The other fires reported during the year do not call for any detailed notice.

In Appendix C. will be found the separate details for each forest reserve protected from fire during the two past dry seasons.

102. In addition to the forest areas which are under permanent protection from fire, District and Forest officers, in the past dry season, have succeeded in keeping fires out of large areas of second class reserves in the Saugor, Damoh, Narsingpur, and Chhindwara districts. In Saugor the Forest Officer had the boundaries of all the second class reserves cleared, and who invited the aid of the people in suppressing fire whenever it should appear in the forests. The people, as a rule, gave ready assent to this proposal, as they appeared to know the full value of protection, in as much that it increased the available supply of fodder for their cattle during the dry season. Only seven instances occurred of fire in the whole of the unprotected area, and which succeeded in passing over about 10 square miles of forest; the remainder of the area of the second class reserves in this district escaped being invaded by fire. The Forest Officer encouraged by this success, proposes to draw up a regular scheme for the future protection of all the second class reserves in the Saugor district, and hopes to establish his system of protection, on a more permanent basis, with the aid and good-will of the people themselves, who, it may be said, obtain the bulk of the grazing they require for their cattle, in the second class reserves.

The Deputy Commissioner of Damoh, by the issue of stringent orders, and by seeing that these orders were carefully observed by the residents of his district, has placed 31 blocks of second class reserves under protection from fire. The area of these 31 blocks is 139,038 acres. Of this area only 15,227 acres failed in being thoroughly protected. This is a most satisfactory result to obtain from the measures taken, and helps to point to the fact that similar success might easily and cheaply, be obtained in other districts where protection of the forests from fire is urgently needed.

The Deputy Commissioner of Narsinghpur reports that, with exception of one small fire which arose in a Malguzari forest and which from thence passed into the Government forest but where it was speedily extinguished, the 2nd class reserves in his district were successfully protected from fire. The total area of 2nd class reserves in this district is 123,712 acres.

From Chhindwara the Deputy Commissioner reports that during the early part of the season, before the grass inside the forests was ripe for burning, he had as much of the grass outside the forests as would burn, cleared off by fire, thus insulating large areas of forests which remained protected during the dry season.

The success which has followed on the measures which have been tried to check fire from over-running some of the 2nd class reserves during the past dry season, is extremely satisfactory; and it, therefore, affords the Officiating Conservator much pleasure in bringing the foregoing facts to the notice of the Chief Commissioner.

4.—Grazing and Fencing.

Grazing.

103. As a rule all forests that are protected from fire are also protected from grazing. The only exceptions to this rule are those which are made in cases of the kind described below :—

(*a*).—In protected forests, where it is impossible to provide grazing elsewhere for the small number of animals owned by persons residing within such forests.

(*b*).—Where grazing from various causes cannot at present result in any material injury to the forests themselves.

Subject to the above exceptions all 1st class reserves, which are protected from fire, are also closed to grazing.

Protection from grazing is also afforded to certain 2nd class reserves* in the districts of Saugor, Damoh, and Chhindwara. The small reserve of Pandratola, in the Balaghat district, is also protected from grazing. But all other 2nd class reserves are open to grazing.

	Acres.
*Saugor ..	3,643
Damoh ...	5,669
Chhindwara ...	29,071
Pandratola ...	4,820

104. The abstract given below exhibits the numbers and kinds of animals, and for which data are available, to which the Government forests afforded grazing during the year 1883-84.

	First class reserve.	Second class reserve.
Buffaloes ...	27,783 ...	317,068
Cows and bullocks ...	132,914 ...	2,230,141
Sheep and goats ...	4,430 ...	465,620
Ponies and donkeys ...	91 ...	1,665
Camels ...	33 ...	146

The information, as regards the actual number of animals grazed, given in this abstract is still incomplete; because returns showing the number of animals licensed to graze during the year have not been received from the districts of Bhandara, Jubbulpore, and Bilaspur, nor has any information been received from Sambalpur as to what the proportion of revenue, credited under major head R II. was on account of grazing. In the case of all other districts Deputy Commissioners have forwarded the necessary data. This incompleteness is to be regretted; and to prevent failure in this respect in another year, special instructions will again shortly issue for the correct compilation and punctual rendition of returns, without which data it is impossible to submit, for the information of Government, a complete record of the grazing which the 2nd class reserves annually afford to the owners of cattle in these Provinces.

105. The income realized under this head, during the two past years, is contrasted below :—

1882-83	Rs. 378,512
1883-84	Rs. 387,950

To the income realized in 1883-84 from this source, the 1st and 2nd class reserves contributed respectively in the following proportions.

1st class reserves ...	Rs. 25,747
2nd class reserves ...	Rs. 362,203

Below will be found a statement showing the details of grazing by Divisions and Districts. This statement, it must be remembered, is still incomplete, as regards the actual number of animals grazed in the Government forest. This incompleteness is due to the cause which has been explained in the preceding paragraph.

Division.	1883-84.						Remarks.
	Buffaloes.	Cows and bullocks.	Sheep and goats.	Ponies and donkeys.	Camels.	Revenue.	
1st Class Reserves.						Rs.	
Mandla ...	779	9,094	...	1	...	1,360	
Hoshangabad ...	6,659	37,966	189	7	15	6,024	
Betul ...	3,638	13,026	698	...	...	2,612	
Nimar ...	9,292	22,486	752	16	6	5,349	
Chanda ...	1,059	12,558	1,817	...	...	1,908	
Seoni ...	3,969	26,477	832	14	...	6,055	
Saugor ...	2,387	11,307	144	53	12	2,433	
Total ...	27,793	132,914	4,430	91	33	25,747	
2nd Class Reserves.							
Nagpur ...	5,377	87,321	36,627	...	...	13,199	
Bhandara ...	...	...	...	...	...	19,314	Including revenue from grass.
Chanda ...	49,103	346,135	185,031	...	...	49,814	Do. do.
Wardha ...	12,915	65,170	...	...	...	15,185	
Balaghat ...	5,839	68,386	6,539	...	...	10,379	Including revenue from grass.
Jubbulpore ...	...	...	...	...	...	10,356	Do. do.
Saugor ...	41,136	189,917	14,321	706	...	32,745	
Damoh ...	36,884	169,151	18,085	...	...	30,679	Including revenue from rass.
Seoni ...	22,503	175,582	11,419	...	...	26,524	Do. do.
Mandla ...	47,121	359,165	36,082	...	...	53,960	Do. do.
Hoshangabad ...	19,341	224,338	55,924	683	146	18,477	
Betul ...	14,778	212,178	56,780	276	...	18,505	
Chhindwara ...	13,843	120,531	28,809	...	...	14,549	
Narsinghpur ...	4,159	16,732	1,917	..	...	4,679	Including revenue rom grass.
Nimar ...	23,365	93,674	4,743	...	...	22,649	Do. do.
Raipur ...	15,185	77,747	7,877	...	...	14,654	
Sambalpur ...	6,429	24,114	1,466	...	...	...	Revenue debited to commutation under major head R II.
Bilaspur ...	...	...	...	...	...	6,475	Including revenue from grass.
Total ...	317,068	2,23,0141	465,620	1,665	146	362,203	
Grand Total ...	344,851	2,363,055	470,050	1,756	179	387,950	

5.—Natural Reproduction.

106. Operations, with the view to helping natural reproduction, were undertaken, during the year, in several forest divisions. The details of these operations are given below by Divisions.

Mandla Division. To aid natural reproduction in the Lower Gour forests, cutting out of dominating inferior species has been resorted to with good results. It was expected last year that a too severe cutting of bambu clumps would likely be injurious to the aftergrowth of this species. Experience has now proved this expectation to have been well founded. The method of cutting has therefore been modified, to one of simple cutting over selected clumps, and such stems whose removal was found desirable or necessary for the good of the aftergrowth. The effect of these combined measures, on the natural reproduction in the Lower Gour forests, is all that could be desired. Considerable advance has now been made by the previously suppressed teak. Reproduction from stools is good, and the new shoots are healthy and vigorous. Seedlings, however, have profited greatly by the opening up of cover. The general plan, which is being followed in the treatment of these forests, is to operate over an area of about 30 acres annually; the forest, in the first instance, is divi-

ded into belts 150 feet wide, and every alternate belt is then cut over, by taking out all badly grown trees, and removing or cutting back dominant trees of inferior species. In some parts of this reserve, one of the good results following on this method is the start given to the young and hitherto suppressed growth of bambu—a very valuable forest product in this part of the Jubbulpore district, and the growth of which it is therefore desirable to encourage. The total cost of these operations, during the past two years, has been Rs. 205-5-2; the total area actually operated on being 60 acres, which gives an average cost of Rs. 2-9-5 per acre. The receipts, by sale of the produce cut out, have averaged Rs. 12 per acre, thus showing a net result of Rs 10-2-6 per acre.

107. In the Singrampur reserve coppicing, with the view to encourage subsequent growth of better quality, was continued during the year. Here teak is the principal species operated on. The area worked over in this year is 37 acres, at a cost of Rs. 29-11-4. The receipts from sale of poles and trees removed, is Rs. 229-3-5; or net per acre Rs. 5-6-4. The cuttings, made in 1882-83, have resulted in a vigorous growth of shoots which have now attained an average height of 8 feet.

108. Reproduction in the Barela reserve is reported as being good all round, the teak being specially so; blanks are reported as now filling up, although gradually; some of the grass lands are now shown to be occupied by such species as teak, tinsa, and other concomitant though inferior species. These forests are very dry, and reproduction in them must necessarily be slow and a work of time.

109. Reproduction in the Jugmundal reserve is well forward, except in the low lying open moist situations which are subject to excessive frost during the cool season. The open valleys in this reserve, are all, however, more or less subject to heavy frost at that season.

110. It is reported that wherever it was possible for young forest growth to survive in the grass blanks, it has there made considerable progress in the open spaces within the Chuharigogarh reserve.

Sal forests.

111. Wherever protection from fire has been afforded to these forests reproduction in them is all that could be desired. The sal forests in these Provinces are, everywhere, divided by long and wide open grass covered plains. The soil, as a rule, in these plains, is moist. The plains themselves are intersected with ravines and nallas, containing water which is in motion all the year round. The expansion of the sal forests into these wide plains is a matter of the utmost solicitude and importance to the Forest Department; because of the large areas which are thus lying in an unproduction condition. On the higher slopes of these plains the soil is well adapted for the support of the sal, but all efforts hitherto made by this species to spread itself into these open plains has failed, owing to the annual fires which used to burn up everything on the plains. But now that fires have been successfully kept out of these forests for the past few years, frost has become as great an enemy to the young growth as fire was to it formerly, and the injury done by the former to the young growth of sal during the past cool season, has been excessive. Acres on acres of healthy vigorous young poles having been cut back by it. The remarks quoted below are extracted from Captain Losack's Annual Forest Report for 1883-84, on the observed injurious effects of frost in these forests :—

> "56. In the Bunjar valley Forest, the frost of the year has done much to retard reproduction by injuring a vast number of young sal plants. In many places the damage has been considerable. This was especially noticeable on the right bank of the Desi Nalla, near its junction with the Sulkum, which was examined on the 7th April 1884, by the Officiating Conservator of Forests, and the Divisional Officer. This portion of the forest was severely handled in 1878-79 and 1879-80, by the very intense frosts of those years. In those years sal trees of 80 feet high and upwards had their foliage nipped and not only in this part of the forest, but in several other portions the same fact was observed. In paragraph 40 of the Annual Administration Report for 1878-79, it is mentioned that in "one" place the intensity of the frost was so great that sal trees were found frost nipped up to a height of 80 feet; this is a mistake, it occurred in many places, and not to one tree, but to many. There is no question, but that the intensity of the frost is the most active force there is, in preventing the extension of the forest over blanks, where the formation and other conditions are suitable. The damage in this year has been confined to the young growth."

57. It is worthy of mention that Dr. Brandis, the late Inspector General of Forests, when he visited this forest in February 1876, passed from Khana to Monara No 128. Thus he went over the same portion of the forest as the Officiating Conservator of Forests and myself (7th April 1884). But in the suggestions on the Forest Administration, Central Provinces, dated April 1876, Dr Brandis makes no mention of the injury done to this portion of the forest by frost. It is not credible that Dr. Brandis could have passed over such a strong factor against the regeneration of this forest as frost, without noticing it, had it existed"

"58. In 1874-75 there had been sharp frost, but from the Divisional officer's personal knowledge, he can state that no such injury was done to the growth as occurred in the years 1878 to 1880. Mr. Mahomed Ghouse, Sub-Assistant Conservator of Forests, who was in this forest in 1873, has no recollection of great damage from this source."

"59. Can it therefore be that the intensity of frost, and consequently the damage done to the reproduction of different species, especially sal, is an agent of late years. Possibly some officer who had served in this Division, previous to the present Divisional Officer being appointed to it, may be able to throw some light on the matter"

"60. That frost is the strongest agent against regeneration of this forest, is clear. In many places acres upon acres of fine poles lost their leaders in 1878 to 1880, and there is evidence on the ground to show that on these areas there had existed a fine growth of sal. These poles have since then, generally speaking, thrown out fresh leaders, and in a few years possibly, if frosts of similar intensity do not occur, traces of the injury will be very difficult to find: but will these poles ever yield marketable timber? I do not believe they will."

Hoshangabad Division.

112. The operation of cutting over ill grown or injured teak trees, and which was referred to in last report, was continued during the year in both the Rajaborari and Saonligarh reserves.

In Rajaborari the cutting was confined to an area of 90 acres in the Ajnal block. The number of trees cut out of this area is 4,734, and the cost of the operation was Rs. 174-0-9. The stools thus cut over have generally thrown out strong young shoots. The shoots resulting from the cuttings made in 1881-82, have now attained an average height of 10 feet and a girth of 6 to 7 inches.

Cuttings in the Saonligarh reserve have been confined to the Dekhna block in which they were spread over an area of 50 acres. The number of trees cut out is 632 at a cost of Rs. 23-9-0.

The material, resulting from the cuttings in both reserves, has been collected at depots, conveniently situated, for sale. The quantity sold up to end of the year, and the price obtained for this material, will be found referred to in another Chapter of this Report.

Betul Division.

113. Preparations, for similar operations, to the above described, were also made in this Division. In the Khamapur reserve 730 trees were marked for removal at a cost of Rs. 4-2-0, but the number of trees actually removed in the year was only 91; these were cut up and sold for Rs 135 Further cutting was delayed for want of purchasers to buy the material, but who were expected to arrive in the forest later on; and as these men prefer to cut up the material themselves, to suit their own special requirements, at their own expense, it was considered advisable to delay operations until their arrival in the forest.

One of the difficulties which lie against any large sale of produce from this reserve is the want of cart roads leading out from it into the more populous parts of the country. In order to meet this want a project is now in hand for making a cart road leading from this reserve to the Berar frontier. And until this cart road is made, any work, undertaken to help the natural reproduction in this forest, must continue to be carried out on a small scale.

In the Baka plantation the coppicing of teak which had been injured by frost, was carried out to the extent of removing 2,621 young teak trees at a cost of Rs. 11-10-0.

Nimar Division.

114. Nothing in the way of coppicing was done in this Division during the year. The cuttings carried out in the Punassa and Khandwa reserves, during previous years, have resulted in a crop of shoots which are singularly deficient in straight growth, though in any case the present crop is far more valuable than the one it has replaced. It must be understood that the old stock cut out was composed chiefly of pollards and trees that had become stunted in their growth from the

long combined effects of frosts and fires. The replacement of such stock by one of more vigorous growth, and in which the defects caused by pollarding do not exist, is a decided gain obtained for the new stock now composing the forest. The causes which have reproduced deflected and flexured growth doubtless lie in the character of the soil occupied by the forests. The soil being chiefly derived from a highly silicious trap which might almost be called a trachyte. It may, however, be noted here that phenomenon precisely similar, involving flexured and deflected growth of teak, has also been observed in other trap districts of these Provinces. Whilst the Officiating Conservator was inspecting the Punnasa reserve, the forest area over which fire had passed in May 1882, was examined. The effects of this fire were every where conspicuously visible in the large numbers of trees which had been killed by it. It was seen that trees, which had attained a height of 50 feet, had not only been killed but that all their principal branches had likewise been burnt off. Of course it is obvious that in such a fire as this one of May 1882, the crops of young teak poles, which had resulted from the coppicing operations carried out in this reserve during previous years could not have survived the conflagration, and this was made apparent by the large number of clumps of standing poles literally charred from top to base.

It is indeed rare, and happily that it is so rare, to find forest fires inflicting such complete and lasting injury to living forests of trees as the fire of May 1882. The causes which doubtless helped to aggravate the injury done by this fire may be summed up in the following statement :—

1st, the forests themselves are open;

2nd, the grass in these open forests attains a considerable upward growth ;

3rd, the fire occurred at the driest period of the year ; and

4th, that its action was intensified by being fed by a strong wind.

It was in their efforts to cope with this fire that a party of men, headed by Forest Ranger Mahadeo Rao (now promoted to Sub Assistant Conservator of Forests), were caught up by it and several burned to death.

Wardha Division.

115. In the Dhuga reserve operations were confined to an area of 30 acres, over which all ill grown and defective teak trees were removed, with a view to obtaining a better class of after growth from off their stools. This operation also took into account injurious cover overhead, and its removal. At the same time cleaning was also performed, wherever that was found necessary to help the more valuable species in obtaining a start. The number of teak trees removed was 768, yielding 812 saleable poles. The cost of these operations was Rs. 58-15-9. Measures, similar to the above, were also undertaken in the Erjhar reserve in which an area of 50 acres was cut over and cleanings done. The number of teak trees removed in Erjhar, was 1,507, yielding 997 saleable poles, at a cost of Rs. 142-5-0.

6.—Artificial Reproduction.

116. The remarks under this head refer to both 1st and 2nd class reserves.

1st Class Reserves.

Mandla Division.

It is reported that considerable damage was done by frost to the several small plantations in this division. The plantations of Teak and Sissu have been seriously injured, the young trees, in most instances, having been killed back to the very ground by the frost. In the Bunjar Valley Forests about 200 young Katung bambus were planted out during the year along the banks of water courses, and these transplants are now reported to be doing well.

Hoshangabad Division.

117. In a 10 acre blank plot, in the Rajaborari reserve, seeds of the following species were sown in drills before the commencement of last rainy season, namely *Teak*, *Bija*, *Tinnus*, *Saj* and *Palas*. The result of this sowing has been that 75 per cent of the seed sown had germinated, with the exception of that of *Teak*, which did not germinate at all. It is, however, added that during the past dry season the young seedlings had withered for want of protection from the sun and dry winds. But, it is also expected, that a large percentage of these seedlings are still alive

and that they would reproduce shoots during the ensuing rains. Similar sowings, to the above, were made in a 4 acre blank space in the Saonligarh reserve. The site of this sowing is on the left bank of the "Lilburria" stream in the Dakhna block. The following quantities of seed were sown:—

Teak	...	6	maunds.
Saj	...	2	do.
Palus	...	2	do.
Kusum	...	20	seers.
Khair	...	20	do.
Tinnus	...	1	maund.
Hurra	...	10	seers.
Bija	...	10	do.

The general results, as regards the germination of the seeds, have not been so favourable as in the case of the similar sowings made in the Rajaborari reserve. An examination of the plot during the last dry season showed that seedlings of the following species were then alive:—

Teak	...	1,500	seedlings.	These numbers are approximate.
Saj	...	300	do.	
Palus	...	1,500	do.	
Kusum	...	50	do.	
Khair	...	50	do.	
Tinnus	...	200	do.	
Hurra	...	30	do.	
Bija	...	50	do.	

Previous experiments made in sowing seed broadcast, had altogether failed in producing any results. The ground when examined, even after the lapse of three or four years from the time the sowings were made, showed results as *nil*. It has therefore now been decided to sow the seed on roughly prepared drills; and the experiment carried out last year on this plan gives promise of better results. An experiment with the view to introducing the sal tree into the Bori reserve has been tried with some success. About two maunds of seed of this species was sown in roughly prepared drills in the month of June or shortly after the seed had ripened. A large percentage of the seed germinated, and a considerable number of young plants were alive at the close of the year, which give promise of becoming established in their new situation. The results of the experiment being so far good, it is intended to continue the sowing of the seed of the sal tree in this reserve, the soil in which is well adapted for this species.

118. Planting out mango and jamun trees along existing fire lines, as a protection against fire encroaching on the reserves, was continued with more or less success during the year. In the Saonligarh and Rajaborari reserves, the young transplants, put out in previous years, are now reported as not having done quite so well, as those planted out in the Bori reserve. The work of creating belts of evergreen trees along the edge of existing fire lines, and the filling up of blanks along the outer boundaries of the reserves has the attention of all Divisional Forest officers

Betul Division.

119. Preparations for planting out along existing fire lines in the Khamapur reserve were made during the year. 1,264 three feet cube pits were dug and filled with leaf mould, and 1,550 young seedling mangoes have been raised in baskets, and which will be transplanted during the present rainy season. The cost of these operations up to date amounts to Rs. 96-2-9 In addition to the above 48 pits of similar dimensions were prepared by the fireguards and planted up by them. The total number of trees now raised as avenues by this class of establishment in this reserve is 377 up to close of last year.

In the Bowergarh reserve 1,976 three feet cube pits were dug, and 2,000 mango seedlings have been raised, which will be put out during the current rainy season. The cost of these operations in Bowergarh was Rs. 74-12 0.

The following work was completed by the fire watchers attached to this reserve; 311 pits dug and planted up, of which 239 young transplants are reported as doing well, and which now average a height of 2½ feet. Experimental sowings, similar to those carried out in the Hoshangabad division, and which have already been described, were also carried out in the Bowergarh and Khamapur reserves.

In the Khamapur reserve 14 acres was sown with *mohwa* seed with the result that upwards of 300 young *mohwa* seedlings are reported as having now become established. In the Bowergarh reserve seeds of *Khair* and *Bel* were sown in prepared lines, with the view to stocking up a blank along the boundary. These sowings have resulted in a vigorous crop of young seedlings of both species. In addition to the sowings, 500 young *mohwa* trees were planted out in pits arranged 10 feet apart each way. This small plantation is reported as doing well.

In the Baka teak plantation, with the view to creating an undergrowth and companion for this species, *tinnus* has been sown with considerable success. The cost of the foregoing operations in the Bowergarh reserve, and the Baka plantation, has been Rs. 11-6 and Rs. 4-14-6 respectively.

The small experiment with sandalwood, tried in this reserve, and which was alluded to in paragraph 111 of last report, has now proved a complete failure. There were only 36 plants of this species alive at the close of the last official year.

Nimar Division.

120. The opening remarks in this paragraph refer to the previous work done in this division in the way of artificial reproduction. The area planted out in 1880-81 has proved a practical failure. Similar work done in 1881-82, and which had been carried out on the same lines as the work of the previous year, has, however, proved more successful, in so far as concerns the bambu transplanted in that year, of which a considerable number is reported as having now become established. Even this partial success is something gained, and something learned of the conditions which prevail in the forests of this division, and which have, hitherto, baffled the efforts of forest officers in establishing artificial plantations of young trees, except at a cost which would have been fatal to the continuance of the experiments. During the year the only new work done was in planting 1½ acres previously prepared in a succession of parallel trenches and ridges, and planting on the ridges only. The transplants put out were bambu and sissu, with seeds of *tendu*, *saj*, *dhoora*, and *rohun* sown in between. This method, though more expensive than any hitherto tried, gives promise of better success.

Saugor Division.

121. In the Hathkho reverse 3,354 yards of trench and ridge were made and sown with seeds of various forest trees. The success of these sowings has, however, been considerably marred by the heavy frosts during the last cool season which have done much to cut back growth previously made. Bambu plantations in the Ranipura reserve are reported to be doing well. The growth of shoots during the past monsoon season averaged as much as 12 to 14 feet. In Garhakota 11,631 Sissu transplants and 610 bambu clumps were planted out during the year.

Chanda Division.

122. A plantation consisting of 300 mango trees was made during the year, with the view to affording shade to the timber depot at Warora. 300 mango trees were also planted out at convenient halting places, and near forest nakas such as Padmapur, Botijhiri, and Kalapani, in the Moharli reserve. The above plantations are reported as doing well.

The following remarks refer to the teak plantations made in previous years in the Moharli reserve. The present condition of these plantations will be learnt from the following:—

3 belts planted out with Burma teak are now reported as being in good condition.

1 belt planted out with Nelambur teak, not in good condition.

3 belts planted with Ahiri teak, in good condition.

3 belts of Ahiri teak planted at Goverdhan, Singora and Dewara, in the interior of the forest, not in good condition.

In the case of the three last belts the effect of existing cover has acted injuriously on the growth of the young teak.

2nd Class Reserves.

Damoh District.

123. At Kishuntalao, which is distant about 2 miles from the Civil station of Damoh, seeds of the following species were again sown, namely, *Teak*, *Saj*, *Hurra* and *Koha*. The Deputy Commissioner reports that transplanting was carried out during the year with the following result:—

Bambus	...	6,000
Karanji	...	2,783
Koha	...	1,165

And adds that "the young trees were utilized principally for roadside avenues in and adjacent to the station, and are the results of sowing operations carried on during the monsoons of 1879-80. Bambus have been distributed gratis to landholders when asked for; in order to encourage their propagation as much as possible in all parts of the District. The cost incurred on these operations has been Rs. 122-7-5."

7.—Cutting of Creepers, &c.

1st Class Reserves.

Mandla Division.

124. This work was again taken up from the point at which it had been discontinued last year, and the ground of that year was also gone over a second time to kill off such of the climbers as had reproduced sufficient aftergrowth to have again become a source of injury to the forest trees. The total area now cleared of climbers in the Jugmandal reserve, up to close of the year, is 2,054 acres. The total cost of this operation up to the same period is Rs. 85-9-8, and the number of climbers destroyed is said to be 99,401.

In the Lower Gour, Bijeragogarh and Barela reserves some 6,000 climbers were destroyed at a cost of Rs 2-10-0 only.

Hoshangabad Division.

125. Climbers are reported as being very numerous, large and destructive in the Bori reserve. In the Dhain block of this reserve operations for exterminating climbers, chiefly *Bauhinia Vahlii*, were undertaken and which was spread over an area of 17 square miles; with exception of a small portion of the ground over which there was not time to go before the year closed, this block was cleared of climbers at a cost of Rs. 36-12-3.

Betul Division.

126. In the Khamapur reserve 5,800 acres of forest were cleared of climbers at a cost of Rs. 147-11-0. The number of climbers destroyed is reported to be 137,217.

In the Bowergarh reserve similar operations were carried out, extending over an area of 6,400 acres, and the number of climbers destroyed is 91,157, at a cost of Rs. 103-10-0.

In both reserves the cutting was performed by dividing the stem close to the surface of the soil, and beating the stool with the axe head in order to separate the bark from the underlying cambium layers, and thus prevent the growth of dormant and adventitious buds from the stools.

Seoni Division.

127. Work was confined to the Korai Range in localities in which teak had been coppiced in former years. Mr. Jacob reports that 120,000 climbers were destroyed in this range alone which, before they were cut back, had involved in their growth the young teak poles that have sprung up after the coppice cuttings.

8.—*Experiments and Exotic trees.*

Experiments for determining annual growth.

128. Measurements taken last year in the Banjar valley sal forests were again repeated during the year, and the observed results posted in a register which has been opened for that purpose. From a special report, submitted by Captain Losack, Deputy Conservator of Forests, on the subject of these experiments, the following information is now extracted.

Banjur Valley forests.

Three plots, measuring one acre each, were marked off two years ago for the purpose of registering the growth of all the trees standing on each acre plot. The measurements taken in January 1883, were again repeated in January 1884. From a comparison of the observed results obtained during these two years the following has been deduced as regards the annual circumferential growth of sal trees.

No.	No. of sal trees.	Total increment of year in inches.	Average individual increment in inches.
A.	201	122·25 inches.	0·6082 inches.
B.	149	110·375 „	0 7407 „
C.	198	147·380 „	0·7443 „
		Average ...	0·693 inches.

Thus in a total of 548 sal trees whose measurements are now on record, the annual average increment made per tree is 0·693 inch.

As regards the average growth made by trees of the various size classes we may also deduce the following :—

Size classes.	Plot A.		Plot B.		Plot C.	
	Number of trees.	Average individual increment.	Number of trees.	Average individual increment.	Number of trees.	Average individual increment.
18 inches in girth and under ...	64	0·474	55	0·693	33	0·447
36 „ in girth and under ...	117	0·658	83	0·746	153	0·722
54 „ in girth and under ...	16	0·703	10	0·975	11	1·227
72 „ in girth and under ...	4	0·906	1	0·750	1	0·875

These results can, at the best, be of little value at present, and must therefore be looked upon rather in the light of interesting than useful facts. In order to yield any thing like approximately correct data, representative of the average annual growth made by sal forests, and which data could be turned to practical account for the purposes of a general working plan for the Banjur Valley forests, the girth measurements must be continued throughout a series of years.

As a further interesting result which works out from the figures obtained during the past two years is the number of years it would take a sal tree, at present in a lower class, to attain to a class immediately above it. This will be seen by the following :—

To attain a girth of—

18 inches	a tree would require	32·88	years.
36 inches	it would require	23·80	„
54 inches	it would require	19·88	„
72 inches	it would require	20·57	„
	or a total of years to attain first class size.	97·13	„

Measurements, similar to the foregoing, have also been recorded of growth of sal trees in the Bijeragogurh reserve, and from the data thus obtained, it is now inferred, that the growth of sal in that forest is much slower than in the Banjur Valley forests. From a manipulation of the figures thus obtained for Bijeragogurh it is made to appear that there was a difference of nearly 30 years between the relative periods required by a tree to attain first class dimensions in the Bijeragogurh forests as compared with one in the Banjur Valley. This great difference, if true, may probably be due to the greater dryness of the soil and climate of Bijeragogurh.

Bijeragogurh Forests.

129. During the year 4 oz. of seed of the *Eucalyptus vimanalis* was received from the Under Secretary to the Government of India, letter No. 786, dated 18th October 1883. This seed was distributed to the Saugor, Mandla, and Nimar Divisions; and clear and detailed instructions, for the treatment of the seed, and after management of the seedlings were, at the same time, forwarded to the Divisional Officers concerned. Reports since received from two out of the three officers to whom the seed had been sent, state that the seed had germinated, with the results which are shown below:—

Eucalyptus vimanalis.

Saugor—2,700 seedings, said to be doing well.

Mandla—2,372 seedlings, said to be doing well.

Nimar—The seed had germinated, but not freely. The number of seedlings obtained has however not been reported from this Division.

In Saugor and Mandla, where the climate is somewhat cooler and moister than in Nimar, this species may succeed; but it is now doubtful whether it will outlive the dry seasons in Nimar.

130. The experiment of cultivating the tea plant in the Banjur Valley forests, which was referred to in para 122 of last report, has not been extended. A few plants are still alive, but they were not looking healthy when the site of the plantation was visited in April last. The climate of the Banjur Valley is far too dry for this species; and it is now so far clear that there is no prospect of tea ever paying as a commercial undertaking in this part of India.

Mandla Division.

A few *Excalyti* are still alive in the Banjur, which are the present survivors of some that were planted out in 1878-79. There are about a dozen young trees altogether, five or six of which have attained a height of twenty feet. Seed of *Eucalyptus vimanalis* before mentioned, was sown during the year in the Banjur and Bijeragogurh reserves, with the results already noted. The seedings have been planted out in nurseries.

131. The Orangery which was planted out in a former year at Kirgaon has been kept up. The young trees have grown up in splendid form, but up to date the fruit produced by them has not been worth much. Paradoxical as it may appear, the climate of the Khandwa reserve is far too cold for the orange tree ever to ripen its fruit properly. The air in this part of the country is exceedingly dry during the cold weather months, the site of the Orangery is in a moist hollow with a rich dark soil, and frosts consequent on these conditions existing, are very severe from November to January, that is, about the very time when the fruit usually ripens in these Provinces. The outlay on account of up-keep of this Orangery has been considerably reduced since the Officiating Conservator of Forests visited the Khandwa reserve in January of this year. Attached to, and forming part of the Orangery, is an experimental garden and nursery, for the raising of forest trees, with the view to affording scope for the practical study of their habits and growth requirements. And in order to render the locality more healthy than it would otherwise be, as the head-quarters of the Forest establishment in charge of the Khandwa reserve, the available ground, round about the garden and nursery, has been brought under cultivation for farm crops.

Nimar Division.

The nursery now contains a large quantity of young bambu (*Dendrocalamus strictus*) ready for planting out; besides bambu, it also contains a collection of various other forest trees. The *Eucalyptus vimanalis* of which seed had been forwarded from the Conservator's Office, had germinated, but not freely; and up to the close of the year the young plants were reported as being still in an unhealthy condition. The number of seedlings of this species which had thus been obtained has not been reported.

During the year Kirgoan was visited by a swarm of locusts, which remained about the locality for a considerable time, utterly destroying the farm crops which happened to be down when they arrived. After the locusts had left came the frost, killing off the *tur* crop which had meanwhile been put down. The total expenditure incurred in Kirgoan during the year was Rs. 783 5-0, and the receipts by sale of fruit, vegetables, and farm crops, amounted to Rs. 229-8-3.

The following arrangements have now been made to reduce the expenditure on the experimental garden and nursery in Kirgaon. The Orangery and nursery are both to be kept up, for which 2 coolies will suffice for watering with the *mote*, and for weeding. The land hitherto cultivated for farm crops, has been let out on annual lease at a rent sufficient, or very nearly sufficient, to cover the cost of the up-keep and maintenance of the Orangery and nursery. The Divisional Officer, who has carried out these arrangements, is now thoroughly alive to the necessity of making the Kirgaon experimental gardens, as far as practicable, self-supporting, and there is little doubt that he will succeed in doing so.

Chanda Division.

132. During the year 50 young Carobs were planted out, which are reported as having been in good condition at close of the year. In addition to the Carobs, some bambu and *Agave* were planted out as a hedge round the large compound of the forest bungalow at Chanda. The following plantations, of previous years' formation, are also reported as in good condition, namely:—4 groves of *Pithecolobium saman*, two at Moharli, 1 at Chanda, and 1 at Allapelli. The trees at Allapelli have attained a splendid growth, and evidently here have found a climate and soil well suited for their devlopment. The trees have not fruited yet. In the Moharli experimental garden 22 Mahogany trees are reported as being in good condition. In the small experimental plantation, attached to the Chanda forest bungalow, the following trees are reported as alive at close of the year:—

Nim 50; Mahogany 28; *Eucalyptus saligna* 49; Carob 42; Mango 139; Teak 608; *Hardwickia binata* 1,207; Jamun 20.

The cost of the up keep of the experimental gardens at Moharli and Chanda together has amounted to Rs. 225-0-3.

Seoni Division.

133. Nothing was done in this division during the year to introduce or carry out new experiments. The results of previous experiments are summed by the Divisional Officer in the following words;—

"*Pithecolobium saman* grows freely at Korai, but in a straggling fashion, which up to the present goes far not to confirm the great reputation once given it as a tree suited for camping grounds and affording dense shade.

"The Australian trees [*Eucalypti*] continue, a few, to struggle for life at Korai and in the Seoni public garden, but their survival cannot last much longer. The Carob continues to flourish at Seoni and Rukhur. In the public garden of the former it is very luxuriant, and one out of several has this year seeded for the first time. The Mesquit grows at Korai, but gives no promise of ever fulfilling the expectations under which it was introduced, and in point of fact I cannot say less than that attempts to introduce foreign trees have met with but partial success in this division."

Saugor Division.

134. The *Pithecolobium saman* and *Eucalypti* are reported as doing well. Some seed of *Eucalyptus vimanalis* was forwarded during the year from the Conservator's Office, from which altogether about 2,700 young plants have been raised; these it is proposed to plant out during the present monsoon; 84 Carobs and 15 *Pithecolobium saman*, which were raised from seed in the past year, were also planted out, and are reported as having done well since. The cost of these experiments is Rs. 51-7-0.

Telunkherri estate.

135. The experimental operations referred to in paragraph 126 of last year's report, were continued during the year. A new plantation, consisting of Mahogany, Tun, Bambu, and various other useful species, was added, during the year, to the several older plantations of previous years. This estate is, to some extent, now self-supporting. Last year the expenditure on it exceeded the income by Rs. 154-0-0. This year the expenditure is again in excess of the income by Rs 412-0-0. This will be seen by the following comparison:—

1882-83. ... Income Rs. 2,496-0-0, Expenditure Rs. 2,650 0-0.
1883-84. ... Income Rs, 1,996-0-0, Expenditure Rs. 2,408-0-0.

The smaller income for the latter year is due to the difference in price for which the fruit crops of the estate sold for that year. In the former year the realizations under this head were Rs. 1,232-0-0; in the latter year the receipts were only Rs. 700. Since the chief source of income from this estate, at present, is derived from the sale of the orange crops, any failure in this respect is certain to cut off a considerable portion of the income of the year; and such was the case in the year 1883-84. As a set off, however, against the deficit in this year, there was, at the close of it, a large quantity on hand of firewood, got from thinnings made among the trees in the garden, and a stock of several hundred good orange grafts, of value nearly sufficient to balance the deficit.

A satisfactory feature of the experiments hitherto carried out in Telunkherri, is the successful manner in which several timber and bambu plantations have been established and the promise which these plantations give of a fair income, in the future, by sale of the bambus, which are now attaining maturity, and material got from thinnings which will shortly have to be made in the timber plantations. Considerable practical experience has also been gained in the art of cultivating, in masses, many of our common forest trees, at a cost which will yield a fair percentage on the outlay incurred on these plantations.

9.—Communications and Buildings.

1st Class Reserves.

Mandla Division.

136. In the Lower Gour forests the road, which was commenced in 1882-83, was completed during the year at a total cost of Rs. 170; its length is nearly two miles. This road promises to be of the greatest possible use in opening up the higher portions of those forests to cart traffic. A very good fair weather cart road has also been built in the Barela reserve for the extraction of dry fuel and bambus at a cost of Rs. 42-3-6. The length of this road is about 6 miles. It is now proposed to give this road a more permanent character since it has been found to serve so well as a means of communicating with the higher plateaux in this reserve. Estimates for widening this road, and building revetment walls along it, will now be called for from the Divisional Officer.

Hoshangabad Division.

137. Several of the existing roads in the Rajaborari reserve were repaired to facilitate removal of forest produce. One important line of road, from Burwani to Gorakhal, was put into working order by lowering some of the gradients on it. A charge of Rs. 35-1-6, was incurred on this operation. In the Saonligurh reserve with the view to opening up communication for wheeled carriage, from the forests to the open populous country below, about 14 miles on four different lines of roads were put into thorough repair, so as to admit of laden carts being now used on them, at a cost of Rs. 293-5-6. Three different existing, but long dis-used lines of communication were also opened out through the Bori forest, at a cost of Rs. 75-5-6.

It is proposed to build a forest house at Dhekna in the Saonligurh reserve, and also to sink a well at that place, as the water supply there is not only small, but the water itself is bad. Plans and estimates for these works are now ready, and the works will be taken in hand during the next open season.

An expenditure of Rs. 31-6-0, was incurred in repairing huts for the use of forest subordinates, and Rs. 13-1-0 was spent for repairing tools.

Betul Division.

138. The road leading from the Bowergurh reserve through the village of Katawari towards Mendha and referred to in paragraph 129 of last report, was extended during the year, for another short distance, so as to carry it over an intervening ghat lying between the forest and the country below. The total length of this road is now 5½ miles, which has cost in all up to the close of the last official year Rs. 1,146-4-9. The road is much used, and as it is the only practicable means by which carts can reach the Bowergurh reserve, its importance, serving as it now does a good line for the removal of forest produce from that reserve, is obvious. The road will be continued still further for about 1½ miles and will, when quite finished, connect the more open country below with the forest reserve in the north. Estimates and plans were submitted during the year for a line of road to connect

the Khamapur reserve with the traffic lines which pass through the Melghat forests in Berar. The estimates for this road have not yet been sanctioned, but this will be done shortly in time to commence work by next open season.

Nimar Division. Punasa reserve.

139. A fence was put up round the forest rest-house at Punasa, and some out-houses were erected there at a cost of Rs. 69-3-0.

Chandgurh reserve.

The repairs to forest chowkees cost Rs. 22-4-0, and the digging of a well, which is yet incomplete, as it requires to be sunk deeper, at Sirkio-talao cost Rs. 39-12-0. A well here is absolutely necessary because water is not to be had in the dry season in this locality without having to go a long way to fetch it, and without a constant local supply the forest establishment, posted at this place, is put to great discomforts.

Khandwa reserve.

Doors and window frames were put into the Kirgaon rest-house, at a cost of Rs. 216-14-9. A quantity of grass sufficient to re-thatch the temporary bungalow at Attar, was also collected at a cost of Rs. 27-1-6, and the repairs to and re-construction of some temporary buildings which had been burnt down by fire at Kirgaon cost Rs. 63-12-9. A further expenditure of Rs. 120 was incurred in doing some repairs to the Forest Office at Khandwa.

Chanda Division. Mohurli reserve.

140. A sum of Rs. 86-9-0 was spent in keeping open the principal lines of communication through this reserve.

Ahiri reserve.

Rs. 279-6-4 were spent in carrying out practically the suggestions of the Civil Medical Officers with regard to the depot site at Alapilly which has now been put into thorough order, as regards sanitation and drainage. Total roads Rs. 365-15 4.

Buildings.

Under repairs to Buildings were spent Rs. 122-11-0 on the Chanda forest bungalow, Rs, 28-7-0 on the Mohurli rest-house, and Rs. 7-7-3 on the Alapilly rest-house. Total repairs to buildings Rs. 158-9-3.

Wardha Division—Buildings.

141. During the year a temporary rest-house was built, for the Forest Officer in charge, at Bungrapur at a cost of Rs. 50. A second rest-house is in course of construction at Panjra.

Seoni Division—Buildings.

142. The cost of keeping in proper repair existing temporary buildings during the year was Rs. 122-5-0.

Saugor Division.

143. The charges on account of maintenance of existing temporary buildings were Rs. 36-13-6.

2nd Class Reserves.

Hoshangabad Division.

144. Thirty-three forest Nakas were repaired at a cost of Rs. 189-8-0.

Nimar district.

145. Rs. 8-4-0 were spent on clearing a road through the Gondwana reserve and Rs. 42-10 0 were expended in constructing, and Rs. 17-5-0 in repairing Nakas for the accommodation of forest establishment.

Betul district.

146. Rs. 25-5-6 were spent in repairing Nakas for forest establishment.

In no other Division was any expenditure incurred under this head.

CHAPTER IV.

YIELD AND WORKING.

1.—*Departmental Operations.*

General.

147. Timber operations on any large scale were carried out only in the Mandla and Chanda divisions. Operations conducted by departmental agency in other divisions, than the above named, were confined chiefly to the collection and sale of material cut in the process of coppicing injured and badly grown teak and bambus, the cutting out of saj poles, and the collection and sale of minor forest produce.

Fellings.

The number of trees felled during the year (Form No. 58) is as follows:—

Sal trees	...	547
Teak trees	...	4,906
Saj trees	...	171
Other species	...	12,911
Total	...	18,535

In addition to the above, and which are not shown in the Annual Form No. 58, there were also felled by departmental agency the following kinds of trees in the 1st and 2nd class reserves.

1ST CLASS RESERVES.

Hoshangabad.	Teak	...	5,366
Betul.	Teak	...	91
		Total ...	5,457

2ND CLASS RESERVES.

Bhandara.	Saj poles	...	20,000
		Total ...	25,457

Divisional Officers concerned in these latter fellings have not explained why the above trees were omitted from their Monthly Form No. 4, and the corresponding Annual Form No. 58. The information regarding these fellings has now been obtained from their Annual Forest Reports. Adding the above number of trees to the figures given in the Annual Form 58 the actual number of trees felled departmentally during the year will be seen by the following abstract:—

	Felled in		More 1883-84.
	1882-83.	1883-84.	
Sal	330	547	217
Teak	1,555	10,363	8,808
Saj (trees)	9	171	162
Saj (poles)	...	20,000	20,000
Other species	9,615	12,911	3,296
Total ...	11,509	43,992	32,483

The table of summary given below both contrasts and explains the nature of the fellings carried out in the several forest divisions during the past two years:—

Forest Divisions.	Particulars of fellings.	No. felled in 1882-83	No. felled in 1883-84.	More.	Less.
	SAL TREES.				
Mandla ...	Selection fellings in the Bunjar valley forests for conversion into Railway sleepers and other scantlings to meet the demands of the public	330	547	217	
	TEAK TREES.				
Chanda ...	Selection fellings in the Moharli reserve	400	3	...	397
	Dead trees and wind-falls in the Bimarum and Mirkalloo reserves	90	919	829	..
Saugor ...	Selection fellings (decayed and injured trees)	386	239	...	147
Wardha ...	Fellings with the view to promote natural reproduction and regrowth from stools	670	3,745	3,075	...
Hoshangabad ...	Fellings with the view to promote natural reproduction and regrowth from stools	...	5,366	5,366	...
Betul ...	Fellings with the view to promote natural reproduction and regrowth from stools	...	91	91	...
	SAJ TREES.				
Chanda ...	Selection fellings in the Bhimarum reserve	9	171	162	...
	SAJ POLES.				
Bhandara ...	Thinnings	...	20,000	20,000	...
	OTHER SPECIES.				
Chanda ...	Fellings in the Moharli reserve	9,615	12,911	3,296	...
	Total ...	11,509	43,902	33,027	541
	Net more 1883-84 ...	...	...	32,488	...

148. The quantity and class of material obtained as yield by departmental operations during the year, is seen by the following statement :—

Description of produce.	Estimated quantity. From 1st class reserves. Cubic feet.	Maunds.	No.	From 2nd class reserves. Cubic feet.	Maunds.	No.	Total. Cubic feet	Maunds	Total.
Teak logs	29,753	...	...	10,781	...	...	40,534	...	...
Teak sleepers	11.354	...	...	...	...	...	11,35	...	...
Teak scantlings... ...	5,513	...	...	...	..	...	5,51	...	...
Teak planks	323	...	...	...	...	...	32.	...	...
Teak furdays	16,257	...	...	...	...	...	16,25	...	...
Teak pieces and poles ...	8,691	...	..	...	...	...	8,691	...	...
Sal logs	563	...	...	...	...	...	56	...	..
Sal sleepers	7,975	...	...	...	..	...	7,97	...	...
Sal scantlings	9,220	...	...	...	...	...	9,22	...	...
Sal furdays	576	...	...	...	...	...	576	...	...
Sal pieces and poles ...	125	...	..	...	...	...	125	...	...
Logs other than teak and sal ...	2,351	...	...	...	...	...	2,351	...	...
Sleepers other than teak and sal	2,592	...	...	...	...	..	2,592	..	...
Poles, scantlings, planks &c. do.	41,054	...	...	5,000	...	...	46,05	...	...
Dongas or boats... ...	20	...	...	...	...	...	20	...	...
Firewood	...	18,112	...	...	...	..	...	18,112	...
Charcoal	...	101	..	...	...	...	...	101	...
Bambus	...	...	3,09,928	...	...	...	...	...	3,09,928
Grass Bundles ...	...	...	10,16,643	...	...	...	...	...	10,16,643
Other minor produce and farm crops	...	3,779	...	...	3,450	...	...	7,229	...
Hides and skins ...	...	5	...	...	..	...	...	5	...
Horns	...	49	...	...	...	..	...	49	...

Though the bulk of the yield shown above was obtained from the fellings made during the year, yet a large quantity of this yield was also the produce of dead wood extracted from the forests, and by conversion from logs already brought to depot in the past two years. All particulars regarding these operations will be found in the remarks explaining the work done during the year in the several forest divisions.

The following abstract shows the yield obtained by departmental agency reduced to tons :—

Description of produce.	Quantity estimated in Tons.											
	1st Class Reserves.				2nd Class Reserves.				Total.			
	Cubic feet.	Maunds.	Numbers.	Reduced to Tons.	Cubic feet.	Maunds.	Numbers.	Reduced to tons.	Cubic feet.	Maunds.	Numbers.	Reduced to Tons.
Teak wood	71,891	...	...	1,437·82	10,781	...	...	215·62	82,672	...	...	1,653·44
Salwood	18,468	...	...	369·36	...	...	...	...	18,468	...	...	369·36
Woods other than Teak and Sal ..	46,017	...	...	920·34	5,000	...	...	100·00	51,017	..	...	1,020·34
Firewood and Charcoal	...	18,213	...	650·46	...	...	...	...	...	18,213	...	650·46
Bambus	...	...	3,09,928	442·75	...	...	...	...	...	...	3,09,928	442·75
Grass, bundles	...	...	10,16,643	242·07	...	...	...	...	...	...	10,16,643	242·07
Other minor produce	...	3,779	...	134·96	...	3,450	...	123·22	...	7,229	...	258·18
Hides and horns	...	54	...	2·00	...	...	...	...	...	54	...	2·00
			Total ..	4,199·76			Total ...	438·84			Total ...	4,638·60

149. The quantity of timber and other produce received from the forests at sale depots during the year (Form No. 60) will be seen by the following general abstract.

Transfer to sale depot.

Timber	...	52,144 pieces = 67,281 cubit feet.
Fuel	...	1,095 maunds.
Grass	...	220,921 bundles.
Bambus	...	33,236 pieces.
Ropes made of fibre	...	5 bundles.
Thorns	...	25 yoke loads.
Other minor produce	...	68 maunds.

The principal transfers, from forests to sale depots, were made in the Mandla, Chanda, and Wardha divisions.

Depots.

The produce so transferred was received at the following sale depots:—

Gwarighat,	for the Mandla Division.
Warora,	for the Chanda Division.
Arvi, Wardha,	for the Wardha Division.

150. In annual statement Form No. 61, will be found the details of sales effected during the year at the sale depots, and produce sold locally.

Sales.

The following is an abstract of those transactions :—

I.—At Sale Depots.

Timber	34,166	pieces = 43,376 cubic feet.
Firewood and Charcoal, reduced to maunds	1,017.	
Grass, bundles ...	180,458.	
Bambus, pieces ...	30,784.	
Other minor forest produce, reduced to maunds ...	73.	
Ropes made of fibre, bundles...	5.	
Thorns, Karas loads ...	11.	

II.—Sold at Local Depots.

Timber	46,877	pieces = 60,393 cubic feet.
Firewood and Charcoal, reduced to maunds ...	16,920.	
Do. cubic feet..	800.	
Grass, bundles ...	366,099.	
Do. cartloads ...	3.	
Do. head loads ...	12.	
Bambus, pieces ...	227,399.	
Do. manufactured head loads ...	2.	
Other minor produce, estimated maunds	3,770.	
Farm crops, estimated maunds.	125.	
Thorns, Karas loads	4.	
Fruits, Number	2,104.	
Skins, do.	64.	
Horns, do.	804.	

The totals sales effected (I and II.) during the year will be seen by the details given below :—

Timber	81,043	pieces =	1,03,769 cubic feet.
Firewood and Charcoal	...	...	17,937 maunds.
Grass	...	...	5,46,557 bundles.
do.	...	...	3 cartloads.
do.	...	...	12 headloads.
Bambus	...	...	2,58,183 pieces.
Bamba manufactured	...	...	2 headloads.
Other minor produce	...	...	3,843 maunds.
Farm crops	...	...	125 maunds.
Ropes made of fibre	...	...	5 bundles.
Thorns	...	...	15 karasloads.
Skins	...	...	64 number.
Horns	...	...	804 do.
Fruits	...	...	2,104 do.

Sold to Public Departments.

151. Of the above was supplied to Public Departments (Form No. 64) :—

Timber ...	16,131 pieces		= 40,678 cubic feet.
Fuel ...	...	...	823 maunds.
Bambus ...	...	...	337 pieces.
Grass ...	...	...	10,000 bundles.

Warora Colliery.

The principal demands on the Forest Department were made by the Manager Warora Colliery for wood for pit props, of which several kinds were supplied to him for actual trial in the pits, The wood, which to some extent has now been approved for pit props, is that produced by the *Lebidieropsis orbicularis*, locally known as *Ghurradee*. This species occurs as a small tree on the richer soils found in both the 1st and 2nd class reserves of the Chanda district, it is also found as far north as the southern slopes of the Satpura range. As a fuel this wood is the best among the indigenous woods of the country, it is popularly regarded by the people to be indestructible by insects, and is also considered by them to be well adapted for resisting the effects of climate. The supply of *Ghurradee* pit props made over to the colliery during the year consisted of 7,258 props, measuring 23,472 cubic feet; for this wood the Forest Department charged at the rate of 10 annas per cubic foot delivered on the works at Warora.

The props were supplied from the Moharli reserve. The question of providing the colliery at Warora with a sufficient and durable class of timber to serve as pit props, is an important one, and every effort is therefore being made, by actual experiment, to solve the difficulty In all probability experience will decide the use of *Lebidieropsis orbicularis* as the wood best fitted for the purpose.

The total quantity of timber supplied by the Forest Department, during the year, to the Manager Warora Colliery, will be seen by the following abstract :—

Teak	205	Number =	380	cubic feet.
Saj	1,117	„ =	3,485	„
Pit props of various woods ...	7,675	„ =	24,856	„
Logs and other pieces ...	24	„ =	31	„
Bambus ...	337			

Chhattisgarh State Railway.

The following number of sleepers were supplied to the Chhattisgarh State Railway.

Narrow gauge sleepers,—

	Number.	C. feet.
Teak	2,330	=3,882
Saj	4,722	=7,867
Total sleepers ...	7,052	—11,749

The following other Public Departments were also supplied with timber and forest produce during the year.

Other Public Departments.

Public Works Department, Jubbulpore Division	...	Boat 1, Firewood 823 maunds.
Executive Engineer, Kanhan Dn.	...	Teak pieces 7.
Central Jail, Nagpur	...	Satinwood logs, 50.
Jail Department, Wardha	...	Grass 10,000 bundles.

The balance of stock remaining at sale depots at close of the year 1883-84 will be seen below :—

Timber	...	35,774 Number=	39,341 cubic feet.
Fuel	...	...	212 maunds.
Bambus	...	...	18,167 number.
Grass	...	...	148,612 poolas.
Other minor forest produce		...	48 maunds.

The following abstract shows the receipts and charges accruing from departmental operations during the year :—

		Rs.	a.	p.	Rs.	a.	p.
Receipts ...	RI and RIII ...				85,192	13	7
Charges ...	the whole of A I ...	45,827	0	1			
	Portion of A VI ...	6,880	0	11			
	Portion of A VIII F...	261	12	9			
					52,968	13	9
	Net results Rs. ...				32,223	15	10

1st Class Reserves.

152. The only work done departmentally in this Division during the year, was the collection and sale of lac and firewood. In the Hathibari reserve 17 maunds of lac were collected at a cost of Rs. 12-8-0.

Direction Division.

This, with the balance on hand of the former year, namely 15 maunds, made a total of 32 maunds, all of which was sold and realized Rs. 299.

In the Telunkheri estate there were brought on stock 676 maunds of firewood, obtained from thinnings made among the garden trees, to this was added 195 maunds, the balance that was on stock at the beginning of the year, and which thus made a total of 872 maunds. There were sold during the year 702 maunds realizing Rs. 234. The balance remaining at the close of the year was 170 maunds valued at Rs. 136.

153. Departmental operations in this Division were principally taken up with the felling of selected first class sal trees, and the conversion of the material into railway sleepers and other scantlings required to meet the demands of the public, and in the transport of prepared stock to sale depots. The bulk of the material for conversion into saleable stock was thus obtained from the 547 sal trees felled during the year, but a small additional quantity was also obtained from the following sources :—

Mandla Division.

From fallen trees in the Chuharigogarh reserve: from coppicing of teak in the Lower Gour forests; and recovery of some poles which had been used for tying rafts together. The cutting and collection of bambus, grass, lac, hurra, and other minor forest produce, were also undertaken departmentally.

The following summary shows the yield in this Division (Form No. 59.)

Description.	Number.	Cubic feet.	Maunds.	Head loads.	Pulahs.	Bundles.
Teak logs	22	308	...	...	...	...
Sal logs	28	563	...	...	...	...
Sal sleepers	2,309	7,975	...	...	...	...
Sal scantlings	2,170	9,229	...	...	...	...
Sal furdays	192	576	...	...	..	...
Sal poles	250	125	...	...	...	...
Teak bullees and poles	1,385	693	...	...	...	...
Poles and pieces other than teak and sal	174	87	...	...	...	...
Boats	4	20	...	...	...	...
Firewood	..	...	12,215	263	...	...
Charcoal	...	...	100	...	...	...
Bambus	227,793	...	...	...	...	...
Grass	...	...	...	...	662,050	...
Other minor produce, such as Hurra, Tekur, Mohwa, Chironji, Lac, &c.	...	...	1,476	...	...	5
Hides	17	...	...	...	...	...
Stag horns &c.	345	...	...	...	...	...
Vegetables from forest garden ...	...	...	1	...	...	...

And from the table below given will be seen the transfers of saleable stock made from forests to depot at Gwarighat (Form No. 60.)

Forests.	Depot.	Produce removed. Description.	No. or quantity.	Cubic feet.
Mandla.	Gwarighat.	Sal sleepers 10 × 10 × 5	1,507	5,238
		Ditto 6 × 8 × 5	47	78
		Sal scantlings	158	193
		Sal logs	2	59
		Teak logs	22	308
		Teak bullees	1	1
		Satkutta mulgas	6	3
		Sal furdays	3	9
		Sal bullees	57	29
		Bullees	141	70
		Boat	1	5
		Bambus	8,987	...
		Bambu lot	1	...
		Molain fibre ropes	5	bundles.

154. The details below show the extent to which operations in sawing, and transport of timber were carried out departmentally during the year, and the cost at which the department worked the various details :—

Particulars.	Timber.		Cost.	Rate per cubic foot.
	Pieces.	Cubic feet.		
			Rs. a. p.	a. p.
Sawing sal sleepers and scantlings ...	4,430	17,112	2,893 6 10	2 8·46
Carting logs, scantlings and sleepers from forest to Mocha	3,398	12,785	1,608 5 7	2 0·15
Carting sal scantlings from forest to Kisli ...	834	3,491	514 11 8	2 4·31
Rafting sal logs, sleepers and scantlings from Mocha to Mandla, and from Mandla to Burridhar	2,545	7,177	1,280 8 7	2 10·23
Rafting sleepers and scantlings from Mocha to Silji, and from Silji to Mandla ...	812	2,658	485 11 5	2 11·08
Rafting sal logs, scantlings and sleepers from Burridhar to Gwarighat ...	1,714	5,568	596 1 10	1 8·56

It will be seen from the above that with the exception of the average cost per cubic foot for sawing, which remains about the same as last year, the other charges connected with the details of operations have risen slightly as compared with similar charges in the former year (*vide* paragraph 135 of last report). The cause which has led up to this increased expenditure has been clearly stated and explained by the Divisional officer, whose explanation appears reasonable enough when it is considered that the enhanced cost to the department is the result of efforts made by him, during the year, to induce a better class of contractors to take up the work than the men who have hitherto put themselves forward for that purpose; hence it is not at all unreasonable that charges should have increased slightly. The success achieved so far in obtaining a better set of contractors points also to a better quality of work being obtained from these men in the future. There is, however, a fair prospect of the department being shortly able to withdraw from timber operations in this division, as negotiations are on foot to sell the trees standing in the forest at a fixed royalty per tree, and also to sell the stock of sawn sleepers, including scantlings, &c., now on hand, in forest and in transit to sale depot, at a price which will cover the whole of the expenditure hitherto incurred by the department on this wood, in addition to a profit as royalty on the timber. The sales effected at the Gwarighat and local depots in this Division, during the year, (Form No. 61) will be seen from the following abstract:—

155. Sales at the Gwarighat depot.

Timber ...	558 number=1,178 cubic feet.	
Bambus ...	...	13,918 number.
Other minor produce ...	...	5 bundles.

Sales at local depots.

Timber ...	4,128 number=6,574 cubic feet.	
Fuel ...	...	12,666 maunds.
Bambus ...	...	169,136 number.
Grass ...	...	200,887 bundles.
Other minor produce ...	...	282 number.
Other minor produce ...	...	1,484 maunds.

And the demand made by Public Departments met by a part of these sales (Form No. 64) was:—

Public Works Department, Jubbulpore Division... { Boat No. 1. Firewood, maunds 823.

The balance of stock on hand at the Gwarighat sale depot at close of the year (Form No. 65) was :—

Timber	...	1,692 Number=5,429	cubic feet.
Bambus	...	... 3,800	number.

The receipts and charges accruing under this head were as follows :—

Receipts	...	Rs.	11,832	6	1
Charges	...	„	10,479	12	0

Hoshangabad Division.

156. Cutting over ill grown and injured teak trees with the view to subsequently obtaining a better class of aftergrowth from new shoots was continued during the year, the material resulting from these cuttings, which was dressed and collected at convenient forest depots for sale, comprised all the timber operations carried out departmentally in this Division These cuttings were confined to the Rajaborari and Saonligarh reserves. The number of teak trees removed by these cuttings was 5,366.

The following statement (Form No. 59) shows the quantity and class of produce cut and collected by departmental agency during the year.

Description.	Number.	Cart loads.	Maunds.
Teak stumps	5,366	...	...
Teak choolias	1,283	...	...
Teak saktees	3,775	...	...
Teak khakers	727	...	..
Firewood	...	264	...
Grass pullahs	6,750	...	...
Mohwa	...	...	1
Hides	20	...	...

The quantity and class of produce sold at local depots during the year will be seen by the details given below (Form No. 61.)

Description of produce.	Number.	Cubic feet.	Maunds.	Cart loads
Haldu sleepers	39	39	...	...
Teak stumps	9,442	4,721	...	...
Teak poles	4,749	2,375	...	...
Teak logs	37	185	...	...
Other poles and pieces... ...	1,553	777	...	...
Firewood	...	...	...	264
Grass pullahs	6,750	...	...	...
Other minor produce	...	...	5	...
Hides	20	...	...	...

No demand was made by Public Departments during the year, and no produce was supplied to any such department. The total cost incurred in cutting, dressing and collecting stock at depots for sale was Rs. 261-12-9 (charged under A VIII *f*) and the stock sold realized Rs. 3,620-15-9.

Betul division.

157. There were no timber operations carried out departmentally in this division. The only transaction recorded for the year was the sale of two teak logs at Badnoor.

The receipts and charges under this head were :—

Receipts	...	... Rs. 5
Charges	...	... *Nil.*

Nimar Division.

158. No timber operations were carried out during the year. 800 cubic feet of firewood, cut and collected in former years, and three pieces of old teak wood were sold locally. Other produce collected departmentally will be seen by the statement given below :—

Description.		Number.	Maunds.	Head loads.	Bundles.
Other minor produce	...	...	27	...	...
Farm crops	...	313	96	20	800
Hides	..	28	...	...	...
Grass	Pullahs...	50,000	...	...	...

The local sales of produce will be seen on a reference to Form No. 61, of which, however, the following is an abstract. There was no demand made for produce by any public department.

Description.		Head loads.	Number.	Cubic feet.	Maunds.
Timber	..	...	3	2	...
Fuel	...	...	...	800	...
Confiscated wood	...	7	...	...	5
Other minor produce	...	...	342	...	123

The expenditure incurred under this head was Rs. 222-2-9 and the receipts by sales amounted to Rs. 337-3-3.

Chanda Division.

159. The following trees were felled in this division during the year:—

Moharli Reserve	...	Teak	... 3
		Other species	... 12,911
Bimarum Reserve	...	Saj	... 171
		Total	... 13,085

The following dead wood was also felled, collected, and brought to depot:—

Dead trees and wind-falls from the Bimarum and Mirkallu Reserves, and shown in Form No. 58	Teak. 919

In addition to the above the number and description of logs detailed below, were found as excess logs in forest depots:—

Teak logs	...	...	341
Saj logs	...	...	705
		Total ...	1,046

The abstract statement below shows the quantity of timber and other produce cut and collected by departmental agency during the year (Form No. 59):—

Description.			Number.	Cubic feet.	Maunds.
Timber	...	...	46,650	111,123	...
Bambus	...	...	24,646	...	...
Grass	...	Pullahs...	16,975	...	...
Other minor produce	...	...	2,355	...	1,941

Of this produce the following was conveyed during the year to the sale depot at Warora (Form No. 60):—

Division.	Depot.	Description.	Number or quantity.	Cubic feet.
Chanda.	Warora.	Teak logs ...	37	913
		Teak scantlings ...	1,434	1,117
		Teak planks ...	5,222	2,381
		Teak sleepers ...	2,293	3,821
		Saj broad gauge sleepers ...	3,782	13,131
		Behra logs ...	20	65
		Ayn and Bijasal myals ...	3	46
		Teak moondas ...	1	1
		Saj planks ...	152	139
		Satin logs ...	30	96
		Wood pieces ...	3	2
		Tendoo props ...	256	856
		Seena props ...	22	69
		Aoula props ...	68	264
		Dhaora props ...	45	142
		Mokha props ...	17	63
		Harris ...	305	152
		Dhooras ...	235	118
		Teak poles ...	129	65
		Teak brake blocks ...	9	5
		Dhaora and Gharradee props..	7,258	23,403
		Askoors ...	8,635	4,318
		Bambus ...	24,268	...
		Teak fellies ...	261	131
		Grass Pullahs...	16,975	...

The quantity and class of produce sold at the Warora and local depots will be seen by the following statement (Form No. 61.)

Description.		Number.	Cubic feet.	Maunds.
Teak sleepers	...	2,330	3,882	...
Teak scantlings	...	1,314	1,205	...
Teak planks	..	915	460	...
Teak furdays	...	60	253	...
Teak poles and pieces	...	243	122	...
Saj planks	..	807	529	...
Saj sleepers	...	5,836	11,735	..
Other wood logs	...	64	258	...
Jungle wood props	...	7,676	24,808	...
Other wood pieces and poles	..	9,794	4,897	...
Grass, pullahs	..	16,975	...	...
Horns	...	538	...	...
Bambus	..	17,096	...	...
Garden produce	...	1,910	...	...
Other minor produce	...	...	...	392

The statement following will show to what extent the demands made by public departments were met during the year (Form No. 64.)

Name of Department.	Particulars of supplies.	Amount supplied.	
		Number.	Cubic feet.
Wardha Coal State Railway ...	Timber ...	9,021	28,752
	Bambus ...	337	...
Nagpur and Chhattisgarh State Railway ...	Timber ...	7,052	11,749
Executive Engineer, Kanhan Division ...	Timber ...	7	13
Central Jail, Nagpur ..	Timber ...	50	162

The balance of stock remaining at the Warora Depot at close of the year, (Form No. 65.)

Description.	Number or quantity.	Cubic feet.
Teak furdays	808	2,945
Teak scantlings	6,135	6,865
Teak logs	37	913
Teak planks	4,940	2,151
Teak sleepers	2,293	3,820
Saj sleepers	2,668	9,263
Saj planks	2,763	711
Logs other than teak	13	73
Teak moondas and pieces	7	11
Teak poles and pieces	248	124
Other wood poles and pieces	6,462	3,231
Bambus	14,367	...

160. The following is a more detailed record of the timber operations carried out in this division.

Mohurli reserve.

In this reserve the following timber stock was cut and dressed for transfer to sale depot:—

			Number.
Askoors	...	...	11,239
Harris	...	...	332
Dhuras	...	...	200
Pit props	...	...	8,225
Satin wood logs	...	...	50
Rafters	...	...	30,000
Bambus	...	...	30,000

Of the above stock there was conveyed to sale depot at Warora the following quantities:—

		Number.	Cubic feet.
Teak logs	...	2	6
Satin wood logs	...	50	162
Bijasal logs	...	3	46
Pit props	...	7,451	24,101
Teak poles	...	129	65
Teak post	...	1	1
Askoors	...	8,635	4,318
Dhuras	...	235	118
Harris	...	305	152
Bambus	...	24,206	...

And the following was also conveyed to the depot at Mohurli as preparatory to despatch to sale depot at Warora;—

Khakurs	...	...	No. 5,785
Askoors	...	...	" 186
Bambus	...	...	" 378

The balance of stock not removed before close of the year remained in the forest.

The expenditure incurred on timber operations in the Mohurli reserve during the year was Rs. 8,355-9-7 and the receipts from sale amounted to Rs. 18,707-0-9.

Minor forest produce was collected from this reserve as follows :—

Horns	...	...	No.	445
Honey	...	...	Seers.	34
Wax	...	...	"	10½
Hurra	...	...	"	9,768
Lac	...	...	"	199¾
Mohwa seed	...	...	"	539½

at a total cost of Rs. 162-0-9. The income realized by sale of this produce as well as by the sale of part of the balance of stock on hand from former year's collection, was Rs. 775-9-2.

161. The number of selected and marked trees felled in the Bhimarum reserve was, saj 171. In addition to this there were felled 919 dead teak trees which were cut up and converted into logs. The total yield in logs from the above trees was 2,511, which were brought to depot. Besides these 284 logs were purchased from the Zemindar of Ahiri; and 341 teak and 705 saj logs were added to the stock, already in depot, from rejected excess logs found in forest depots. Thus the total number of logs brought to book at the Alapilly depot during the year was

Ahiri reserves.

		Number.	Cubic feet.
Teak logs	...	2,621	30,381
Saj logs	...	174	2,144

at a cost of Rs. 2,942-15-9.

162. There were put to the Saw-Mills during the year for conversion into sleepers, planks, and various other scantlings, upwards of 63,138 cubic feet in rough logs, which resulted in an out-turn of clean-sawn marketable sound wood measuring 35,702 cubic feet. The wastage in conversion amounted to 27,436 cubic feet, or nearly 43½ per cent of the rough material in log put to the mills was found unfit for conversion into any form of saleable scantling.

This heavy percentage is due solely to the inferior class of logs which had been worked up. Much of this wood, as has elsewhere been shown, was obtained from dead and fallen trees found in the Bhimarum and Mirkulloo reserves. In addition to this wood there were also over a thousand logs, of previous years rejections, brought on stock and passed through the Saw-Mills, with the view to utilise whatever of sound wood there was in them. The total number of rough logs cut up at the Saw-Mills during the year was 5,476= to 63,138 cubic feet. The number of feet of sawing done was 196,376 linear, and 229,793 superficial. The number of sawn pieces obtained was 18,502=35,702 cubic feet. And the charges incurred in sawing amounted to Rs. 4,948-2-8; which is equal to Rs. 13-13-9 per 100 cubic feet for conversion. The tables below give all the details of this work:—

Timber.		Feet cubic.		Out-turn.			Current charges.		
Logs	Cubic feet.	Running feet.	Superficial feet.	Kind and description of timber.	Number of price	Cubic feet.	Rate per 100 cubic feet.	Total.	Remarks.
5,476	63,138	196,376	229,791	Teak sleepers 6 feet×8 inches×5 inches.	6,809	11,343	Rs. 13-13-9	Rupees 4,948-2-8.	Rate per 100 cubic feet of rough timber Rs. 7 13 5.
				Saj sleepers 6 feet×8 inches×5 „ ...	1,127	1,878	... 2-8 4		
				Sij sleepers 10 feet×10 inches×5 „ ..	100	417	... 2 2 5		
				Teak scantlings	5,431	5,513	Rate per 100 cubic feet ... „		
				Teak planks	1,021	326	Ditto 100 running feet ... „		
				Teak slabs	4,014	16,225	Ditto 100 superficials feet... „		
				Total ..	18,502	35,702			

Detail of charges during the year 1883-84.

Item No.	Particulars.	Amount.	Total.
		Rs. a p.	Rs a p
1	Pay of Native Foreman	340 0 0	
2	Establishment employed on Machinery	2,663 6 3	
3	Ditto do. Fuel	119 0 0	
4	Ditto do. Charcool	78 13 0	
5	Ditto do. Watering	41 3 1	
6	Oil, grease, &c.	682 4 10	
7	Repairs including Workshop	561 0 7	
8	Miscellaneous	462 6 11	
	A.—Total current charges	4,948 2 8	
	B.—Add cost of Establishment and maintenance during recess ...	.....	
	C—Add capital outlay on machinery	494 13 0	5,442 15 8
	Total out-turn of marketable timber 35,702 cubic feet—		
	Total charges per 100 cubic feet of marketable timber	15 3 10	

It will have been seen from the foregoing tables that when capital charges are added to the working charges the cost of conversion is raised to Rs. 15-3-10 per 100 cubic feet of out-turn. It was reported last year that the steam sawing machinery, including the boilers and engines, had to be dismantled, cleaned, and repaired. During the last rainy season Mr Taylor, Assistant Conservator of Forests, was sent from Nagpur to Alapilly for a short period to superintend the dismantling of this machinery, and to leave written instructions with the local officers regarding the thorough overhauling and cleaning of all parts of it, and for carrying out such repairs as should be found necessary. This was accordingly done, but the whole of the machinery was not again in a condition fit for work until November of last year, since which period, however, it has been working well and smoothly.

163. The work completed during the year in timber transport operations will be seen by the following Statement :—

Depots. From.	Depots. To.	Distance in miles.	Description of material.	Number.	Cubic feet.	Remarks.
Forests ...	Allapilly ..	5	Logs, teak ...	2,621	30,381	Transported by carts.
			„ saj ...	174	2,144	
Allapilly ...	Donarghat ...	60	Sleepers, narrow gauge—			
			Teak ...	5,392	8,982	
			Saj ...	1,145	1,902	
Do. ..	Kirmiri ...	30	Do. teak ...	2,298	3,828	
			Sleepers, broad gauge—			
			Saj ...	1,012	3,513	
			Scantlings, teak ...	254	243	
Do. ...	Warora ..	103	Logs, teak ...	26	689	
			Planks, teak ...	3,641	1,832	
			„ saj ...	152	140	
			Scantlings, teak ..	48	76	
Donarghat ...	Thappad ...	32	Sleepers, teak ...	5,417	9,025	Transport up stream by Wynganga river.
			„ saj ...	48	80	
			Scantlings, teak ...	450	452	
			Slabs, teak ...	412	611	
			Planks, teak ...	2	2	
Thappad ...	Tiddi ...	33	Sleepers, teak ...	7,204	11,999	
			„ saj ...	2,023	3,356	
			Scantlings, teak ...	2,164	1,637	
			Slabs, teak ...	2,810	4,198	
			Logs squared, teak ...	84	546	
			Planks, teak ...	4	4	
Donarghat ...	Tiddi ...	63	Sleepers, saj ...	1,370	2,282	
Kirmiri ...	Tullana ...	96	Sleepers, broad gauge—			Transport up stream by Wardha river.
			Saj ...	3,632	12,610	
			Sleepers, narrow gauge—			
			Teak ...	2,293	3,820	
			Logs, teak ...	3	62	
			Scantlings, teak ...	858	644	
			Planks, teak ...	1,591	559	
			Fellies, teak ...	269	...	

The charges incurred on timber transport operations were as follows :—

Paid for carting ...	Rs. 4,175	6	5
Paid for floating ...	„ 5,516	10	1
Total ...	Rs. 9,692	0	6

164. The total charges incurred during the year on all operations were Rs. 34,028-7-4, and the receipts under the corresponding head were Rs. 50,836-8-0.

Wardha Division.

165. The following stock was collected by Departmental agency in this Division during the year, (Form No. 59).

Description of produce.	Number.	Jothi load.	Head load.	Bundles.	Maunds.
Teak poles and pieces	4,345	...	...	...	...
Poles and pieces other than teak ...	17,137	...	...	8	...
Firewood, cart loads	99	...	5	14	240
Charcoal	...	...	2	...	...
Bambus	25	...	...	...	...
Grass, poolas	231,118	...	...	...	...
Other minor produce	...	29	...	...	72
Hides and skins	1	...	...	...	...

The following stock was disposed of by sale during the year (Form No 61).

Description of produce.	Number.	Jothi load.	Cart load.	Head load.	Bundles.	Maunds.
Teak scantlings	16	...	...	...	...	...
Teak poles	3,703	...	...	..	...	...
Teak pieces	97	...	...	...	...	...
Other wood logs	1	...	...	...	...	...
Poles and pieces other than teak ...	15,474	...	...	...	...	...
Firewood	...	...	82	9	76	633
Charcoal	...	...	...	...	...	9
Bambus	173	...	...	...	...	...
Grass, poolas	181,983	...	2	...	...	...
Thorns	...	12	...	...	...	...
Bukhul	...	...	...	...	1	...
Other minor produce	127	...	...	...	...	74
Hides and skins	1	...	...	...	...	...

The only Public department served was the supply of 10,000 bundles of grass to the Wardha Jail (Form No. 64.)

The balance of stock remaining at the Arvi and Wardha depots at close of the year was as follows :—

	Number.	Jothi load.	Bundles.	Maunds.
Teak poles and pieces ...	647	...	...	...
Other wood, pieces ...	7,052	...	8	...
Firewood ...	...	...	...	212
Grass, poolas ...	143,612	...	...	...
Thorns ...	...	12	...	...

Charges incurred on Departmental operations were Rs 931-4-9, and the corresponding receipts were Rs. 4,291-4-7.

Seoni Division.

166. The following statement shows the quantity of produce collected, including dead wood, in this Division, during the year (Form No. 59.)

		Number.	Cart load.
Teak poles and pieces	...	1	5
Poles of other wood	...	2	...
Firewood	...	...	90
Bambus	...	57,464	...
Grass, poolas	...	49,750	...

The following produce was disposed of by sale during the year (Form No. 61).

		Number.	Cart load.
Teak poles	..	228	—
Teak pieces	...	...	5
Firewood	...	...	9
Other wood, pieces	...	4	...
Other wood, lots	...	8	...
Bambus	...	57,503	..
Grass, poolas	...	139,962	...

The receipts and charges under the head Departmental operations were :—

Receipts ...	... Rs.	1,553	6	6
Charges ...	... ,,	528	7	1

Saugor Division.

167. The only work done in this Division was the felling of 239 injured and decayed teak trees and the logging and cutting up of the same into saleable material.

The receipts and charges under this head were :—

Receipts ...	... Rs.	189	5	9
Charges ...	... ,,	3	6	0

2nd Class Reserves.

Mandla District.

168. From the reserves in this district 3,450 maunds of Hurra fruit were collected, at a cost of Rs. 1,057-11-3, and which realized on sale Rs. 4,474-10-6. It is believed that the hurra crop for the ensuing year, in this district, has been sold in advance for Rs. 5,000.

Hoshangabad District.

169. The statement following shows the yield obtained by Departmental agency.

Description.	Number.	Cubic feet.	Lots.	Cart load.	Poney load.	Jothi load.	Head load.
Teak poles and pieces	509	255	...	...	...	...	...
Logs other than teak	6	30	...	...	...	...	...
Other wood poles and pieces ...	279	139	244	420	14	4	1,439
Firewood	2	...	...	10	62	...	11
Charcoal	...	...	...	...	...	...	14
Bambus	357	...	...	...	...	...	...
Bambu mats, &c.	...	...	...	...	...	...	2
Grass ... ... Poolas	..	...	...	1	...	...	12
Other minor produce	72	...	...	4	...	...	55

The whole of this yield was sold, realizing Rs. 1,312-7-4. There is no expenditure recorded against the collection of this yield.

170. In the Sironcha Sub-division 911 teak logs (dead wood) measuring 10,781 cubic feet were collected from the forests and stacked along the banks of the Indrawati river. The cost of collecting and bringing the logs to river bank was Rs. 969-10-6, and the lot was sold for Rs. 5,440.

Chanda Division.

Mohwa seed to the extent of 1,678 maunds was collected at a cost of Rs. 252, and the lot sold for Rs. 1,250-5-6. The seed was collected with the view to supplying it to a Bombay Firm of merchants for export as oil seed. But this object was not carried out, as owing to sufficient precautions to secure the seed from damp not having been taken, much of it got damaged during the rainy season, and the lot had in consequence to be sold locally to the highest bidder. The demand for this seed is on the increase, and a very handsome revenue might therefore be got from it, if only Divisional and District Officers, in charge of forest reserves, would set about and devise some means for collecting, drying, and storing the seed safely until it could be delivered on the railways. The prices likely to be obtained for it will certainly not be unremunerative, as has been already demonstrated to some extent by the small experiment carried out but incompletely in the Chanda Division.

171. Under the orders of the Deputy Commissioner thinning out saj poles was effected. 20,000 poles were cut and sold locally, which realized Rs. 2,110-13-0.

Bhandara Division.

There is nothing to show in the Divisional Annual report what the poles cost for cutting and collecting.

2.—Produce removed by Purchasers.

172. There was no change made during the year in the methods by which purchasers are permitted to pay for and remove forest produce from, and to obtain grazing in, the Government forests both 1st and 2nd class reserves.

The various methods which are in force have already been clearly described by Dr. W. Schlich, Inspector General of Forests, to the Government of India, in his suggestions regarding Forest Administration in the Central Provinces, published last year. This description of the different methods has again been repeated by the Author in his review of the Forest Administration in British India for the year 1882-83. It is therefore unnecessary to show here what is already so well described. The present remarks on the subject will consequently be confined to a further elucidation than has yet appeared in print, of the principal features in which one method differs from another in application.

There are only three methods by which purchasers are allowed to remove forest produce from the Government Forests and to obtain grazing in them for their cattle. These are by:—

1.—Commutation.
2.—License for fixed quantities.
3.—Direct payment (Kham Tehsil.)

As regards this last method, *i. e.* the Kham Tehsil, it is at present in force principally in one forest reserve, namely Moharli, in the Chanda division. The method by License for fixed quantities is, however, now in general use in all districts and forest divisions, including both 1st and 2nd class reserves. Licenses are issued for both grazing and the removal of forest produce. Commutation, in addition to the use of Licenses, and side by side with the latter, is in force at the present day in the following districts, namely:—

Nagpur Civil Division.
Chanda, Balaghat, Bhandara.
Nerbudda Civil Division.
Hoshangabad, Betul, Nimar, Chhindwara.
Jubbulpore Civil Division.
Jubbulpore, Seoni, Saugor, Damoh, Mandla.
Chhattisgarh Civil Division.
Raipur, Sambalpur.

Commutation, as now in force in the above named districts, may include only wood for agricultural purposes, or wood for house building purposes only, or it may also include both; or it may include, in addition, the following other produce such as, thorns, leaves, gums, grass and fuel, but no grazing. In some

districts, again, Commutation is understood to mean a license granted on a certain fixed payment being made, for the removal, at the option of the purchaser as to time and place, of a *fixed* quantity of forest produce. But this is not Commutation, it is the License method pure and simple. Commutation, as is here understood and restricted, means that method by which for a fixed payment permission is secured for the removal without let or hinderance of an *unlimited* quantity, for personal consumption only, of that class or kind of forest produce for which the purchaser has entered into contract.

The Commutation method, therefore, differs from the License method chiefly in this, that under the former, for a fixed payment, an *undefined* quantity of any class of produce may be removed.

The License method, on the other hand, deals with aggregate quantities, for each of which a fixed price, corresponding to the load, is fixed. The aggregate unit may be a load of any size, such as a man's, bullock's, or pony's load, or a load of two or four bullock cart, &c.

Whereas the Kham Tehsil is the method of direct payment for each individual article of produce removed from the forest, it deals in the units of produce, and is the method of close working. It is, in fact, the method of working the forest by direct departmental agency. A modification of the Kham Tehsil is to permit the purchaser to enter the forest and make his own selection of the produce, which has been prepared in advance by professional wood cutters, or may be by direct departmental agency, and to let him bring it out at the depot, where the produce is examined and paid for. The principle of the Kham Tehsil is, therefore, to work direct, and to work *close* by taking into account separately each article of produce, and to realize its fixed value. It is the method which must ultimately prevail in all forests worked on rational principles. Since it is the only method yet devised for investigating the precise values of all produce removed, and registering, with any certainty, the total quantity consumed in the year, or within any given time. In the hands of a trained establishment the method is perfect, for it is the method of *exactness*, and none other can be more perfect than that.

173. The information which appears in the following combined statement of produce removed from the 1st and 2nd class reserves by purchasers is still not complete, as regards the actual quantities of produce removed from the 2nd class reserves, for the following reasons:—In the first place no data of any sort as to quantity or class of produce removed during the year have been received from the districts of Bhandara, Jubbulpore, Nimar, Sambalpur, and Bilaspur; and, secondly, because of the Commutation method existing in no less than 14 out of 18 districts in these Provinces, it is impossible to arrive at any figures which would even show approximately what the annual consumption of produce was under this method:—

Description of produce.	Quantity estimated in cubic feet, and maunds=80 lbs.								
	From 1st Class Reserves.			From 2nd Class Reserves.			Total.		
	C. ft.	Maunds.	Numbers.	C. ft.	Maunds.	Numbers.	C. ft.	Maunds.	Numbers.
Teak logs ...	3,950	...	...	3,76	...	...	7,710	...	...
Teak poles and pieces ...	64,571	...	...	8,389	...	...	72,960	...	...
Logs other than teak and sal ...	50	...	...	130	...	...	180	...	...
Poles and pieces other than teak and sal ...	98,024	...	...	1,952,767	...	...	2,050,791	...	...
Sleepers do. ...	237	..	...	...	...	..	237	...	...
Boats or Dongas ...	15	...	...	...	...	...	15	...	...
Fencing wood ...	...	...	...	...	137,070	...	...	137,070	...
Firewood ...	...	287,550	...	...	2,852,787	...	...	3,140,342	...
Charcoal ..	...	2,714	...	...	42,269	...	...	44,983	...
Bamboos ..	...	...	3,086,858	...	...	4,972,421	...	...	8,059,279
Materials made of bamboos	...	99,969	...	...	5,872	...	...	105,841	.
Other minor produce and farm crops ...	...	23,327	...	...	242,214	...	...	265,541	...
Grass Pullas...	...	...	28,018,837	...	...	37,334,600	...	...	65,353,437
Hides and Skins ...	...	58	...	...	3,308	...	...	3,366	...
Horns ...	...	40	...	...	1,157	...	...	1,197	...
Mineral products ...	1,674	...	...	...	...	...	1,674	...	...

The following general abstract of summary of produce removed is based on the details given in the foregoing statement. The quantities removed have now been estimated in tons. The data which would give a closer approximation to the actual yield, expressed in one denomination only, are, however, still imperfect.

Description of produce.	Quantity estimated in tons.											
	1st Class Reserves.				2nd Class Reserves.				Total.			
	Cubic feet.	Maunds.	Nos.	Reduced to tons.	Cubic feet.	Maunds.	Nos.	Reduced to tons.	Cubic feet.	Maunds.	Nos.	Reduced to tons.
Teakwood ...	68,521	...	...	12,70·42	12,149	...	...	242·98	80,670	...	...	1,613·40
Woods of other than teak and sal ...	98,276	...	...	1965·52	1,952,897	...	...	39,057·94	2,051,223	...	...	41,023·46
Fencing wood ..	...	...	...	...	...	137,070	..	4,895·36	...	137,070	...	4,895·36
Firewood and charcoal ...	...	290,270	...	10,366·79	...	2,895,056	...	103,394.86	...	3,185,326	...	113,761·65
Bambus and materials made of bambus ..	...	99,969	3,086,858	7,990·11	...	5,872	4,972,421	7,313·14	...	105,841	8,059,279	152 93·25
Grass pulas ...	...	...	28,018,837	6,671·14	...	...	37,334,600	8,889·18	...	...	65,353,437	15,560·32
Other minor produce and farm crops ...	...	23,327	...	833·11	...	242,214	...	8·650·50	...	265,541	...	9,438·61
Hides and horns ...	...	98	...	3·30	...	4,465	...	159·46	...	4,563	...	162·96
Mineral products ...	1,674	...	..	...	...	...	...	...	1,674	...	...	...
			Total .	29,190·59			Total ...	172,603·42			Total .	201,794·01

Therefore expressed in terms of one denomination the quantity of produce removed by purchasers, for which data are available, will be seen from the following abstract:—

1st class reserves, area 2,593 square miles	Tons	29,190 ·59.
2nd class reserves, area 16,837	,,	172,603 ·42.
Total ... area 19,430	Total tons ...	201,794 ·01.

The above given areas of 1st and 2nd class reserves are as they stood during the greater part of the year, and are corect for all practical purposes.

3.—Free Grants of Produce.

174. There is no information to record under this head.

4.—Summary of Produce Removed.

175. The following summary gives the information under this head :—

Description of produce.	Quantity estimated in tons.															
	By purchasers.				By Departmental Agency.				Total.			
	Cubic feet.	Maunds.	Numbers.	Reduced to tons.	Cubic feet.	Maunds.	Numbers.	Reduced to tons.	Cubic feet.	Maunds.	Numbers.	Reduced to tons.
Teak and sal wood ...	80,670	...	...	1,613·40	101,140	...	...	2,023·60	181,810	...	...	3,636·20
Woods of other than teak and sal.	2,051,223	...	...	41,023·46	51,017	...	...	1,020·34	2,102,240	...	...	42,043·80
Fencing wood ...	...	137,070	...	4,895·36	...	...	...	...	...	137,070	...	4,895·36
Firewood and charcoal ...	...	3,185,326	...	113,761·65	...	18,213	...	650·46	...	3,203,539	...	114,412·11
Bambus and materials made of bambus.	...	105,841	8,059,279	15,293·25	...	...	309,928	442·75	...	105,841	8,369,207	15,736·00
Grass pulls ...	...	...	65,353,437	15,560·32	...	...	1,016,643	242·07	...	...	66,370,080	15,802·39
Other minor produce ...	...	265,541	...	9,483·61	...	7,229	...	258·13	...	272,770	...	9,741·74
Hides and horns ...	...	4,563	...	162·96	...	54	...	2·00	...	4,617	...	164·96
Mineral products ...	1,674	...	...	...	...	...	...	...	1,74	...	...	...
Total ...				201,794·01				4,638·60			Total ...	206,432·61

Of which the following is an abstract :—

Removed by purchasers ...	Tons	201,794·01
Removed by departmental agency ...	,,	4,638·60
Total removed tons ...		206,432·61

5.—Imports and Exports of Forest produce.

176. There is no information to record nunder this head.

CHAPTER V.

FINANCIAL RESULTS.

177. The financial results of the Department for the year 1883-84 are:—

Revenue	...	Rs. 9,94,769
Expenditure	...	„ 4,36,057
Surplus	...	Rs. 5,58,712

The financial results of the two past years are compared together by the figures given in the abstract below:—

		1882-83.		1883-84.	
		Rs.	Rs.	Rs.	Rs.
Receipts ...	...		9,77,647		9,94,769
Charges ...	A ...	2,35,545		2,57,252	
	B ...	1,76,703	4,12,248	1,78,805	4,36,057
Surplus ...	...		5,65,399		5,58,712

Revenue in the year 1883-84 has exceeded that of the previous year by Rs. 17,122, but the expenditure also has been greater in the former than in the latter year, whereby the surplus is less by Rs. 6,687 than in the previous year.

178. Compared with the sanctioned estimates for the year 1883-84 the actual monetary transactions of the year stand thus:—

Receipts.

Sanctioned estimates	...	...	Rs. 9,80,000
Actuals	...	...	„ 9,94,769
More, Actuals		...	Rs. 14,769

Expenditure.

Sanctioned estimates, A. Conservancy and Works.			Rs. 2,96,260
Actuals	...	...	„ 2,57,252
Less, Actuals		...	Rs. 39,008
Sanctioned estimates, B. Establishments		...	Rs. 1,93,740
Actuals	...	...	„ 1,78,805
Less, Actuals		...	Rs. 14,935

The actual income has exceeded the esitmates by Rs 14,769, while the expenditure was less than the estimates by Rs. 53,943. The estimated surplus for the year was Rs. 4,90,000. The actual surplus is Rs. 5,58,712. So far the results of the year appear satisfactory.

179. Comparing the receipts and charges of the year 1883-84 with the of average receipts and charges for the three years previous, the figures below show the result:—

			Average for the past 3 years ending 1882-83.	For the year 1883-84.
Receipts	...	Rs.	10,00,223	9,94,769
Charges	...	„	4,68,258	4,36,057
Surplus	...	Rs.	5,31,965	5,58,712

Here too the comparison is satisfactory, for the year under review shows a larger surplus than the average.

180. Reproducing here, but with a slight necessary alteration, the table which was given in paragraph 163 of last report, the average income and expenditure of the Department for the last 12 years will appear as follows :—

Years.			Receipts.	Charges.	Surplus.
			Rs.	Rs.	Rs.
1872-73 to 1874-75	...	...	5,70,606	2,75,211	2,95,395
1875-76 to 1877-78	...	...	6,90,190	3,25,693	3,64,497
1878-79 to 1880-81	...	...	9,03,241	4,70,600	4,32,641
1881-82 to 1883-84	...	...	10.48,433	4,48,439	5,99,994

In this case also comparison shows the steady progress that has been made in the average income and surplus of the Department during the past 12 years.

181. The following table abstracted from Form No. 57, Financial Results, exhibits figures showing separately the financial state as regards 1st and 2nd class reserves, so arranged as to contrast them with similar figures for the previous year.

Particulars.	1882-83.			1883-84.		
	1st Class.	2nd Class.	Total.	1st Class.	2nd Class.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	1,87,131	7,90,516	9,77,647	1,79,788	8,14,981	9,94,769
Charges	1,70,695	2,41,553	4,12,248	1,74,612	2,61,445	4,36,057
Surplus	16,436	5,48,963	5,65,399	5,176	553,536	5,58,712

In the 1st class reserves receipts contrasted with the year previous are less by Rs. 7,343, while in the 2nd class reserves they are more by Rs 24,465. The charges, as shown in this table, in both classes of reserves are in excess of previous year, thus:—

1st Class reserves by	...	Rs.	3,917
2nd Class reserves by	...	„	19,892
Total Rs.	...		23,809

182. The following is an abstract of the statement which appears as an Appendix D. to this Report.

The figures here reproduced represent the actual credits and debits as they stand against 1st and 2nd class reserves respectively. In this statement the Direction charges are shown separately, and not as spread over the several Divisions and Districts as in the Financial Form No. 57 before referred to.

Divisions.	Receipts.		Charges.		Surplus.		Deficit.	
	1882-83.	1883-84.	1882-83	1883-84.	1882-83.	1883-84.	1882-83	1883-84.
1st Class Reserves	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs
Direction	2,634	2,599	39,344	35,188	...	...	36,710	32,589
Mandla	34,846	15,445	38,306	40,264	..	...	3,550	24,819
Hoshangabad	25,465	26,771	9,746	15,227	15,719	11,544	.	...
Betul	13,854	13,347	6,945	9,196	6,909	4,151	...	...
Nimar	27,052	22 692	21,477	17,698	5,575	4,994	...	.
Chanda	49,677	66,470	43,810	52,338	5,867	14,132	...	
Seoni	24,987	23,713	14,066	15,470	10,921	8,243	...	...
Saugor	8,615	8 751	5,005	4,981	3,520	3,770	...	...
Total ..	1,87,130	1,79,788	1,78,879	1,90,362	8,251	...	...	10,574
2nd Class Reserves								
Nagpur	28,103	90,219	15,620	16,820	12,483	13,399	...	..
Bhandara	53,325	54,930	7,209	7,332	46,016	47,598	...	...
Wardha	25,530	26,827	11,964	13,068	13,566	13,759	...	..
Chanda	85,052	97,749	19,708	25,954	65,344	71,795	...	...
Balaghat	36,005	36,607	9,758	10,667	26,247	25,940	...	...
Jubbulpore	19,487	19,230	5,088	5,773	14,399	13,457	...	..
Saugor	60,975	65,948	20,133	21,479	40,842	44,469	...	...
Damoh	62,486	61,588	13,678	14,183	48,808	47,405	...	..
Seoni	48,852	51,049	15,913	17,159	32,939	33,890	...	.
Mandla	91,245	85,950	15,781	16,309	75,464	69,641	...	...
Hoshangabad	58,190	58,391	22,770	23,495	35,420	34,896	...	..
Nimar	45,923	42,088	21,491	24,830	24,432	17,258	...	...
Betul	41,572	43,574	13,019	15,824	28,553	27,750	..	...
Narsinghpur	14,699	14,438	3,712	4,192	10,987	10,246	...	...
Chhindwara	29,977	29,358	8,232	8,751	21,745	20,607	...	...
Raipur	54,548	54,805	13,213	10,117	41,335	44,688	...	..
Bilaspur	20,391	23,320	6,842	4,159	13,549	19,161	...	..
Sambalpur	14,457	18,911	9,238	5,583	5,219	13,328	...	.
Total ..	7,90,517	8,14,982	2,33,369	2,45,695	5,57,148	5,69,287	...	.
Grand Total ...	9,77,647	9,94,770	4,12,248	4,36,057	5,65,399	5,58,713	...	...

The following remarks, in explanation of the above abstract, refer to the 1st class reserves :—

Direction Division.

183. The deficit shown against the Direction Division was less than in the previous year by Rs. 4,121, which is due to the difference in pay of Conservators.

Mandla Division.

184. The receipts and charges in this Division were;

Receipts ... Rs. 15,445
Charges ... „ 40,264

Deficit ... Rs. 24,819 as against Rs. 3,550 in the previous year. The causes which have contributed towards this unsatisfactory result are mainly that :—

(*a.*)—Less timber was sold than in the previous year.

(*b.*)—Less timber was brought to sale depot in time to be sold within the year, owing to the unfavourable condition of the rivers for floating timber rafts at the season when such work is possible ; so that while there was the opportunity for getting sale for the timber, the timber itself was not in depot but in transit on the rivers down to Gwarighat. Much of it brought down nearly at the close of the year has since been sold, and the value of it will appear in the receipts for the current year.

The receipts in this Division in 1882-83 amounted to Rs. 34,846 as will be seen by the abstract of the Statement given above.

The financial results of the year in this Division are therefore not satisfactory, although more actual work was done than in the previous year in preparing and forwarding timber and other produce to sale depot. There was a slight

increase in the expenditure of the Division over that in 1882-83, due to increased salary drawn by the Divisional Officer on promotion, and extra work actually done.

Hoshangabad Division. 185.

Receipts	...	Rs. 26,771
Charges	...	„ 15,227
Surplus		Rs. 11,544

There is a falling off in the year's surplus in this Division to the extent of Rs 4,175, due to increased expenditure on operations undertaken to protect the forests from fire, charges on which have exceeded those incurred in former years, owing to more elaborate arrangements having been made. There has also been more expenditure incurred than in previous year on account of the several operations carried out for the protection and improvement of the forests and which have been described in this Report. A larger expenditure has also been incurred on establishment which was sanctioned in Secretary's letter No. 688-35, dated 17th February 1883.

The receipts in the Division were slightly higher (Rs. 1,306) than those in the previous year.

Betul Division. 186. In this Division the receipts and charges in the year stand thus :—

Receipts	...	Rs. 13,347
Charges	...	„ 9,196
Surplus	...	Rs. 4,151

Receipts are less by Rs. 507, and the charges more by Rs. 2,251 than in the previous year. Less timber was sold from the reserves, and the expenditure was increased by the several extra operations carried out during the year for the better protection and improvement of the forests.

Nimar Division. 187 Receipts and charges for the year stand thus :—

Receipts	...	Rs. 22,692
Charges	...	„ 17,698
Surplus	...	Rs. 4,994

The surplus by Rs. 581 and the expenditure by Rs. 3,779 are less than in the previous year.

Income from the Kalibhit reserve has fallen off, while it has risen in the other reserves, the net deficit of the Division being that shown by the figures above; expenditure has been less owing to the reduction of charges on the Khirgaon experimental garden and nursery, and the reduction of work in artificial planting.

Chanda Division. 188.

Receipts	...	Rs. 66,470
Charges	...	„ 52,338
Surplus	...	Rs. 14,132

The recipts by Rs. 16,793, and the charges by Rs. 8,528 are more than in the previous year. While the surplus in 1883-84 is larger by Rs. 8,265. Both income and expenditure were largely increased by the operations carried out for supplying pit props to the coal mines at Warora.

Seoni Division. 189. The financial results of this Division will be seen by the following :—

Receipts	...	Rs. 23,713
Charges	...	„ 15,470
Surplus		Rs. 8,243

which is less by

Rs. 2,678 than the surplus of 1882-83. Receipts are also less by Rs. 1,274, and the charges more by Rs. 1,404 than in the former year. Various causes have been assigned for the decrease in the revenue of the year, among others it is stated that the presence of a man-eating tiger kept purchasers from visiting the forests as they might otherwise have done. The increase in charges is due to actual excess under head A. Conservancy and Works by Rs. 292, and Rs. 1,112 under head B. Establishments, owing to increased pay on promotion of the Divisional Officer.

Saugor Division.

190. The receipts and charges of the year show thus :—

Receipts	...	Rs. 8,751
Charges	...	„ 4,981
Surplus	...	„ 3,770

The receipts and surplus are slightly more, and the charges less than in the previous year, and do not call for any detailed remark.

Wardha Division.

191. The financial accounts in respect of the two 1st class reserves in this Division have not yet been separated from the accounts appertaining to the management of the 2nd class reserves. But this will now be done. Hitherto these reserves have stood as second class in the records of the Department.

192. On going back to the abstract of Statement D. which is reproduced at para 182, and taking a general view of the financial results obtained in the 1st class reserves, their income, and expenditure (inclusive of the whole of the Direction charges) will be seen by the following statement :—

Income	...	Rs. 1,79,788
Expenditure	...	„ 1,90,362
Deficit	...	„ 10,574

as against a surplus of Rs. 8,251 in the year 1882-83.

The income from these reserves was less by Rs. 7,342, and the expenditure more by Rs. 11,483 than in the former year.

Eliminating for the present the deficits shown in the Direction and Mandla Divisions, the total surplus of revenue derived from all other reserves during the the past years will be seen by the figures given below :—

Surplus in 1882-83	...	Rs. 48,511
Surplus in 1883-84	...	„ 46,834

The difference between the financial results of the years in question is not so very great as would appear at first sight. What has caused the surplus for 1883-84, to disappear are the deficits in the,

Direction Division	...	Rs. 32,589
Mandla Division	...	„ 24,819
Total	...	Rs. 57,408

The Direction Division is not a paying one, the reserves of Hathibari and Kuntra nala, and the Telunkheri estate, all absorb expenditure without as yet paying sufficient to cover the charges incurred on them, whilst the salaries of a Conservator with that of his Office Establishment, and one Assistant Conservator stand debited to the Division, and which constitute what are called general charges on account of Direction, which in the Financial Statement Form No. 57, are spread proportionately over the 1st, and 2nd class reserves.

In the matter of the Mandla Division, the case is different, and the facts concerning this Division may be recapitulated here, namely, that the deficit is caused by shorter receipts having been obtained by sale of timber than in the year previous, though the actual stock to credit of this Division was largely increased by the operations of the year, but none of the assets, which had thus accrued, were realized during the year under review.

193. Passing on to a review of the financial results, in respect of the 2nd class reserves, and again referring back to the abstract of Statement D, which will be found at para. 182. It will, it is believed, be sufficient to give

here only a general idea of their position without entering into any particulars, as has been done in the case of the 1st class reserves. The total receipts and charges on account of 2nd class reserves stand as follows:—

Receipts	...	Rs. 8,14,982
Charges	...	„ 2,45,695
Surplus	...	Rs. 5,69,287

These figures when compared with similar figures for the year 1882-83, exhibit the following general facts.

Receipts for 1883-84 have increased by Rs. 24,465, charges have also increased by Rs. 12,326, and the surplus has been more by Rs. 12,139 than in the previous year.

So far the results are satisfactory. The actual surplus of the year shows increase in 6 out of the 9 districts in which the 2nd class reserves are managed direct by Forest Officers in addition to the management of their 1st class reserves. The three defaulting districts are Hoshangabad, Nimar, and Betul, which are all included in the Nerbudda Civil Division. In Hoshangabed the deficit amounts to Rs. 524, in Nimar to Rs. 7,174, and in Betul to Rs. 803. The explanation of the deficit in Nimar is that receipts fell off by Rs. 3,835, and the expenditure was more by Rs. 3,339. The falling off in receipts is ascribed to the prevalence of Commutation by which persons, who, not paying Commutation fees, are still able to provide themselves with forest produce under the cover given them by those who have paid for that privilege. With the limited establishment at his disposal the Divisional Officer despairs of ever being able to check the depredations committed by the unauthorized users of forest produce. The question of Commutation is now under revision, and it is to be hoped that it will be abolished, and the method of working the forests by License adopted instead. The excess expenditure now shown against this Division is only nominal, as it represents the pay and travelling allowance of an officer engaged on the survey, and demarcation of forest boundaries, and who for sometime also took part in the general management of the 2nd class reserves.

In six out of the remaining nine districts in which the 2nd class reserves were managed during the past year solely by Deputy Commissioners, the surplus for the year is less than in the previous year. In the three districts in which increase of surplus income is shown, Raipur has contributed Rs. 3,353, Bilaspur Rs. 5,612, and Sambalpur Rs. 8,109. All three districts belong to the Chhattisgarh Civil Division.

194. An abstract of the Form No. 57, which is attached to this Report, is given below, from which will be seen the receipts and charges classified under the three main heads as required by the orders of Government:—

Particulars.		Receipts.	Charges.	Surplus.	Deficit.
		Rs.	Rs.	Rs.	Rs.
I.—Departmental Agency ...	1882-83 ...	75,062	53,711	21,351	...
	1883-84 ...	80,334	59,130	21,204	...
II.—Other Revenue ...	1882-83 ...	9,02,585	2,21,262	6,81,323	...
	1883-84 ...	9,14,435	2,33,413	6,81,022	...
III.—Formation, protection and improvement of Forests ...	1882-83 ...	...	1,37,275	...	1,37,275
	1883-84 ...	...	1,43,572	...	1,43,572
Total ...	1882-83 ...	9,77,647	4,12,248	5,65,399	...
	1883-84 ...	9,94,769	4,36,057	5,58,712	...

"Sale of timber and other produce cut and collected by Government Agency." The apparent want of correspondence between some of the details given in the "Abstract of the Circle" under the head "sold locally" is due to the fact of classification of the produce, by which correspondence among the details themselves was in some instances lost, though the totals quite agreed. The same want of correspondence between the Abstract and the details will appear in Form No. 61 now submitted for the year 1883-84. In a preceding paragraph the manner of compiling this Form has been explained.

"Form No. 63." The discrepency noticed in this Form was due to the omission from it of the totals of revenue under head II in the case of those districts from which details of produce removed had not been received. This omission has, however, been supplied in the Return for the year 1883-84, which will now be found to correspond with the Summary of Revenue Form No. 53.

205. Every effort that was possible has been made towards submitting this Report in time to admit of its being reviewed and reaching Simla by 1st September; but this is scarcely possible now, seeing that one-half of the Report is still in the printer's hands and this is the 18th August. Elaborate measures were taken to ensure punctuality and correct Returns from Divisional and District officers, who, with but few exceptions, have complied with the instructions given from this office. Some of the Annual Reports and Returns, however, did not reach the Conservator's office until late in June and from about that time the compilation of the Annual Statements commenced. There has been, therefore, improvement in this respect, but still more is wanted, and this, it is hoped, will be attained next year.

The Central Provinces Circle is a large one. There are 9 Divisional Reports relating to 1st class reserves, and 18 Divisional and District Reports relating to 2nd class reserves, which have to be studied, reduced, and compiled, and their respective yearly Returns checked before the Annual Statements can be completed.

There is moreover a vast amount of detail which has to be brought into correspondence with the abstract figures shown in the several Appendices, thus consuming much of the time available in which to compile the Provincial Report, and it was by very close application on the part of the Officiating Conservator and his Office Establishment that small progress has been achieved in this respect.

206. The officers of the department, as a body, have worked well, and they, as well as the several Deputy Commissioners of Districts, have rendered the Officiating Conservator all the aid in their power in carrying out Forest Administration during the past year.

207. The services of the following senior officers of the Forest Department deserve mention:—

Lieutenant-Colonel H. C. T. Jarrett, v. c., Deputy Conservator, Hoshangabad. Captain C. W. Losack, Deputy Conservator Mandla. Mr. R. Whittall, Deputy Conservator, Chanda. Mr. W. P. Thomas, Deputy Conservator, Saugor. Mr. G. H. Foster, Deputy Conservator, Nimar. And Officiating Deputy Conservator Mr. W. King, Betul.

208. Assistant Conservators Mr. G. F. Taylor, Nagpur, Mr. M. S. Fowler, Chanda, and Mr. H. B. Anthony, Bhandara, have also done good work.

209. Among Sub-Assistant Conservators, the names of Messrs, Chunder Kumar Chatterjee and Mahomed Ghouse, deserve to be mentioned.

210. Among Forest Rangers Mahadeo Rao Pulnaitkar, Mahomed Khader Baksh, Mahomed Sillamon, Shaik Hoossain, Gunpat Rao, Ramchander Krishna, and Shaik Ahmed have done well.

211. The Members of the Conservator's Office Establishment have worked earnestly and well throughout the year.

R. THOMPSON,

Offg. Conservator of Forest,

Central Provinces.

List of Appendices to the Forest Report for 1883-84.

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49B	Area of Unreserved forests.
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52	Prosecutions for breaches of Forest law.
52A	Ditto ditto
53	Summary of Revenue and Expenditure.
54	Account current.
55	Outstandings and liabilities on account of contractors and disbursers.
56	Outstandings on account of Revenue.
57	Financial results.
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60	Timber, &c. received in sale Depots.
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62	Account of timber &c. in Depots and sold locally.
63	Timber, &c. removed from the forests by purchasers.
64	Revenue derived from and expenditure incurred on timber, &c. supplied to Public Departments.
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	Appendices.
A	Statement showing the actual condition of boundaries and boundary marks of the 1st Class Reserves.
B	Description and plan of the boundary pillars.
C	Comparative statement showing the result of fire protection.
D	Statement showing receipts and charges of each Division and District.
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Annual Form No. 49 (Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1883-84.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1884.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Direction Division.	Bilaspur District...	Hathibari ...	2,123	3	...	...	2,123	3		
	Raipur District ...	Kuntranala ...	3,548	6	...	...	3,548	6		
Mandla Division.	Mandla District ...	Jugmundal ...	24,503	38	...	...	24,503	38		
	Do. ...	Chuharigorgarh.	1,660	3	...	...	1,660	3		
	Do. ...	Banjar valley ...	49,724	78	...	...	49,724	78		
	Do. ...	North Phen ...	6,435	10	...	...	6,435	10		
	Do. ...	South Phen ...	45,967	72	...	..	45,967	72		
	Do. ...	Moti Nala ...	1,658	3	...	...	1,658	3		
	Do. ..	Airi ...	2,150	3	...	...	2,150	3		
	Do. ...	Barela ...	7,153	11	...	...	7,153	11		
	Balaghat District..	Keolikapa ...	6,296	10	...	...	6,296	10		
	Do. ...	Topla ...	45,506	71	...	...	45,506	71		
	Jubbulpore ..	Bijragogarh ...	21,188	33	5,312	...	26,500	41	Chief Commissioner's letter No. 2737-151 dated 27th June 1883.	Transferred from the 2nd Class reserves.
	Do. ...	Lower Gour ...	5,517	9	...	...	5,517	9		
	Damoh District ...	Singrampur ...	6,555	10	...	...	6,555	10		
Hoshangabad Division.	Hoshangabad Dist.	Rajaborari ..	161,645	253	...	...	161,645	253		
	Do. ...	Bori ...	39,680	62	...	...	39,680	62		
	Hoshangabad and Betul District...	Saonligarh ...	96,921	151	...	...	96,921	151		
Betul Division.	Betul District ...	Bowergarh ...	75,520	118	...	...	75,520	118		
	Do. ...	Khamapur ..	108,012	169	...	...	108,012	169		
Nimar Division.	Hoshangabad Dist.	Kalibheet ...	166,400	260	...	...	1,66,400	260		
	Nimar District ...	Punassa ...	91,720	143	...	...	91,720	143		
	Do. ...	Chandgarh ..	61,440	96	...	...	61,440	96		
	Do. ...	Khandwa ...	35,840	56	...	...	35,840	56		
	Do. ...	Undria Booria...	...	...	3,100	...	3,100	5	Chief Commissioner's letter No. 2710-118, dated 6th June 1884.	Transferred from the 2nd Class reserves.
	Do. ...	Bhojwa ...	...	...	720	...	720	1		
	Do. ...	Beheria ...	...	...	1,280	...	1,280	2		
	Do. ...	Ajnal ...	...	...	1,500	...	1,500	2		
	Do. ...	Bainpura ...	...	...	600	...	600	1		
	Do. ...	Chaoria ...	...	...	170	...	170	...		
	Do. ...	Gunjari ...	...	...	3,500	...	3,500	5		
	Do. ...	Susarda ...	...	...	853	...	853	1		
	Do. ...	Kanapur ...	...	...	7,680	...	7,680	12		
	Do. ...	Baidya ...	...	...	6,080	...	6,080	9		
	Do. ...	Dehgaon ...	...	...	1,000	...	1,000	2		
	Do. ...	Telia ...	...	...	360	...	360	1		
	Do. ...	Borari ...	...	...	1,760	...	1,760	3		
	Do. ...	Dehri ...	...	...	A1,400	...	1,400	2		
	Do. ...	Kharda ...	...	...	360	...	360	1		

Annual Form No. 49 (Prescribed.)—Continued.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 1st Class Reserved Forests, 1883-84.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1884.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nimar Division.	Nimar District ...	Andhali ...	...	...	1,280	...	1,820	2	Chief Commissioner's letter No. 2710-118 dated 6th June 1884.	Transferred from the 2nd Class reserves.
	Do. ...	Singaji ...	...	...	14,880	...	14,880	23		
	Do. ..	Dohad ...	...	...	A5120	...	5,120	8		
	Do. ...	Purni ...								
	Do. ...	Gondwana ...	...	...	A1,38,400	...	1,38,400	216		
	Do. ...	Mandwa ...	...	...	A48,800	...	48,800	76		
	Do. ...	Amba ...	...	...	A1,09,440	...	1,09,440	171		
	Do. ...	Shamardeo ...	...	...	A70,080	...	70,080	110		
	Do. ...	Jambupani ..	...	...	A74,080	...	74,080	116		
	Do. ...	Ichhadavi ...	...	...	A15,200	...	15,200	24		
Chanda Division.	Ahiri Zamindari in Chanda District.	Bimarum ...	12,296	19	...	...	12,296	19		
	Do. ..	Mirkulloo ...	8,479	13	...	...	8,479	13		
	Do. ..	Moharli ...	229,612	359	...	...	229,612	359		
Seoni Division.	Balaghat and Seoni Districts ..	Sohawani ..	52,520	82	...	...	52,520	82		
	Do. ..	Korai ...	62,770	98	...	...	62,770	98		
	Seoni and Nagpur Districts ...	East Pench ...	1,23,464	193	...	...	1,23,464	193		
	Chhindwara and Nagpur Districts.	West Pench ...	60,938	95	...	...	60,938	95		
Saugor Division.	Saugor District ..	Garhakota ..	2,899	5	...	...	2,899	5		
	Do. ..	Tigora ...	459	1	...	...	459	1		
	Do. ...	Rangir ...	11,036	17	...	...	11,036	17		
	Do. ..	Ranipura ...	8,109	13	...	...	8,109	13		
	Do. ...	Hathkho ...	19,492	30	...	...	19,492	30		
Wardha Division.	Wardha District .	Erjhar ...	...	...	11,911	...	11,911	19	Chief Commissioner's letter No. 4946-265 of 15th November 1883.	Transferred from the 2nd Class Reserves.
	Do. ..	Dhuga ...	...	...	14,171	...	14,171	22		
		Total ...	16,59,235	2,593	5,39,037	...	21,98,272	3,435		

A. Approximate areas only.

Annual Form No. 49 A.—(Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of 2nd Class Reserved Forests, 1883-84.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1884.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Nagpur Division ...	Nagpur ...	2nd Class Reserves.	2,49,785	390	...	...	2,49,785	390		
Civil Officer ...	Bhandara ...	Do.	3,52,640	551	...	...	3,52,640	551		
Chanda Division ..	Chanda ..	Do.	19,05,399	2,977	...	...	19,05,399	2,977		
Civil Officer ..	Wardha ...	Do.	1,28,034	200	...	26,082	1,01,952	159	Chief Comr's. letter No 4946-265, dated 15th Nov 1883.	Transferred to the 1st Class Reserves.
Do. ..	Balaghat ..	Do.	6,08,089	950	...	...	6,08,089	950	Chief Comr's letter No. 2737-151, dated 27th June 1883.	Do. do.
Do. ..	Jubbulpore ..	Do.	2,10,502	329	...	5,312	2,05,190	321		
Saugor Division ...	Saugor ...	Do.	4,74,488	742	...	503	4,73,985	741	Chief Comr's. No. 1967-102, dated 4th March 1883, and No. 1991 102, dated 5th May 1883.	
Civil Officer ..	Damoh ..	Do.	5,34,743	835	*27	...	5,34,770	836		* Correction of areas.
Seoni Division ..	Seoni ..	Do.	3,54,306	554	...	...	3,54,306	554		
Civil Officer ..	Mandla ..	Do.	14,00,212	2,188	...	...	14,00,212	2,188		
Betul Division ..	Betul ..	Do.	5,45,482	852	...	...	5,45,482	852		
Civil Officer ..	Chhindwara ..	Do.	4,10,412	641	..	...	4,10,412	641		
Hoshangabad Division ,	Hoshangabad ...	Do.	7,58,184	1,185	...	...	7,58,184	1,185		
Civil Officer. ...	Narsinghpur ..	Do.	1,23,712	193	...	...	1,23,712	193		
Nimar Division ..	Nimar ..	Do.	9,65,486	1,509	...	5,07,643	4,57,843	715	Chief Comr's letter No. 2710-118. dated 6th June 1884.	Transferred to the 1st Class Reserves.
Civil Officer ...	Raipur ..	Do.	8,81,280	1,377	...	...	8,81,280	1,377		
Do. ...	Sambalpur ..	Do.	4,57,600	715	...	...	4,57,600	715		
Do: ...	Bilaspur ...	Do.	4,15,360	649	...	...	4,15,360	649		
		Total	10,775,714	16,837	27	5,39,540	10,236,201	15,991		

Annual Form No. 49 B.—(Prescribed.).

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Unreserved Forests, 1883-84.

Division or Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1883.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1884.		No. and date of Notification of addition or transfer.	Remarks.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Seoni Division ...	Seoni District ...	Unreserved Forest.	1,25,587	196	...	...	1,25,587	196		
Nagpur Do. ...	Nagpur Do. ...	Do. ...	5,000	8	...	...	5,000	8		
Civil Officer ...	Damoh Do. ...	Unreserved Forest.	14,413	22	...	...	14,413	22		
Do. ...	Balaghat Do. ...	Do. ...	54,389	85	...	...	54,389	85		
Do. ..	Chhindwara Do. ...	Do. ...	3,959	6	1,088	...	5,047	8		Resumption from clearance lease.
		Total ...	2,03,348	318	1,088	...	2,04,436	319		

Form No. 51.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Area of Forest tracts protected from fire during the dry season of 1884,—to accompany Report for 1883-84.

Division.	Forest tracts.		Up to 30th June 1883.		During dry season of 1884.				Total cost up to 30th June 1883.	Year in which protection commenced.
			Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected	Amount expended.		
	1st CLASS RESERVES.			Rs. a. p.				Rs. a. p.	Rs. a. p.	
Direction ...	Hathibari ...	whole.	2,123	2,927 0 11	2,123	...	2,123	71 5 2	2,998 6 1	June 1870
	Kuntranala ...	"	665	342 6 4	...	...	...	.....	342 6 4	" 1876
Mandla Division ...	Bunjar Valley ...	"	49,495	4,473 8 6	49,724	19	49,705	721 1 2	5,194 9 8	" 1875
	Motinala ...	"	1,659	393 3 2	1,658	...	1,658	78 7 4	471 10 6	" "
	Jagmandal ...	"	22,903	20,046 14 9	24,503	31	24,472	664 12 9	20,711 11 6	" 1867
	Chuharigogarh ...	"	1,661	4,887 14 3	1,660	...	1,660	81 11 4	4,969 9 7	" "
	Barela ...	"	6,997	1,689 11 1	7,153	...	7,153	195 14 7	1,885 9 8	" 1872
	Airi ...	"	2,150	121 14 3	2,150	137	2,013	52 14 10	174 13 1	" 1878
	Singrampur ...	"	6,555	2,195 1 4	6,555	...	6,555	156 9 8	2,351 11 0	" 1871
	Bijeragogarh ...	"	21,188	5,662 4 3	21,188	40	21,148	543 13 4	6,206 1 7	" "
	Lower Gour,	"	2,000	145 1 4	5,517	...	5,517	101 10 10	246 12 2	" 1882
Hoshangabad Division..	Rajaborari Machak, block ...		9,940	4,185 12 4	10,240	...	10,240	1,805 8 7	5,991 4 11	" 1875
	Do. Gunjal, " ...		54,080		54,080	10	54,070			" "
	Do. Ajnal " ...		38,100		38,400	...	38,400			" "
	Saonligarh, Dekna " ...		49,114	2,792 0 4	49,920	960	48,960	1,151 5 11	3,943 6 3	" "
	Do. Tokra " ...		28,160		28,160	...	28,160			" "
	Bori, Bori " ...		23,560	14,924 6 8	23,680	...	23,680	913 10 [illegible]	15,838 1 0	" 1864
	Do. Dhain " ...		16,000		16,000	...	16,000			" 1879
Nimar Division ...	Kalibheet, Jai-Malor " ...		61,958	1,662 6 10	62,080	4	62,076	331 10 1[illegible]	1,994 1 8	" 1874
	Punassa, Block No. I ...		7,680	.....	7,680	...	7,680	.....	.....	" 1875
	Do. " II ...		9,720	.....	9,720	...	9,720	.....	.....	" "
	Do. " III ...		6,680	.....	6,680	...	6,680	.....	.....	" "
	Do. " IV ...		9,695	.....	9,840	...	9,840	.....	.....	" "

Form No. 51.—(Continued).

FOREST DEPARTMENT, CENTRAL PROVINCES.

Division.	Forest tracts.	Up to 30th June 1883.		During dry season of 1884.				Total cost up to 30th June 1884.	Year in which protection commenced.
		Area actually protected.	Total cost.	Area attempted to be protected.	Failures.	Actually protected	Amount expended.		
			Rs. a. p.				Rs. a. p.	Rs. a. p.	
	Punassa, Block No. V ...	9,570		9,600	...	9,600			June 1875.
	Do. „ No. VI. ...	10,830	6,246 5 6	10,880	...	10,880	795 7 8	7,041 13 2	„ 1877.
	Do. „ No. VII. ..	9,180		9,180	...	9,180			„ 1879.
	Do. „ No. VIII. ...	8,349		8,500	...	8,500			„ 1880.
	Do. „ No. IX. ..	6,960		8,960	...	8,960			„ 1881.
	Do. „ No. X. ...	8,640		10,880	138	10,742			„ 1882.
	Chandgarh Whole ...	61,172	2,480 13 4	61,440	31,690	29,750	573 6 2	3,054 3 6	„ 1878.
	Khandwa „ ...	34,688	4,036 13 3	35,840	457	35,383	496 12 7	4,533 9 10	„ 1878.
	Bainpura „ ..	600	73 10 6	600	...	600	24 0 0	97 10 6	„ 1879.
	Gunjari „ ..	3,500	214 1 5	3,500	...	3,500	45 4 11	259 6 4	„ 1879.
	Undria—Baoria „ ...	3,100	108 14 11	3,100	...	3,100	39 13 11	148 12 10	„ 1879.
	Bhojwa—Beheria „ ...	2,000	129 5 7	2,000	...	2,000	48 10 0	177 15 7	„ 1879.
	Ajnal „ ...	1,492	141 13 3	1,500	...	1,500	27 4 11	169 2 2	„ 1879.
	Chaoria „ ...	170	10 14 0	170	..	170	.....	10 14 0	„ 1880.
Betul Division ...	Bowergarh Part ...	37,162	4,640 13 9	38,720	1,120	37,600	891 15 11	5,532 13 8	„ 1875.
	Khmapur „ ...	16,000	1,129 11 6	16,000	...	16,000	277 14 0	1,407 9 6	„ 1875.
Chanda Division ...	Bemarum Whole ...	12,296	12,317 15 2	12,296	18	12,278	1,103 10 11	13,421 10 1	„ 1873.
	Mirkalloo „ ...	8,159	8,295 1 0	8,479	...	8,479	1,230 10 4	9,525 11 4	„ 1875.
	Taroba block „ ..	25,619	9,969 5 3	25,619	...	25,619	1,057 11 1	11,027 0 4	„ 1873.
	Goverdhun „ ...	13,931	5,518 7 10	13,931	...	13,931	512 8 0	6,030 15 10	„ 1874.
	Prepalkote Part ...	...	...	1,280	...	1,280	10 0 0	10 0 0	„ 1882.
Seoni Division ...	Korai Range Korai block ...	31,210	8,675 2 3	31,210	...	31,210	532 14 0	9,208 0 3	„ 1869.
	Do. Sakata „ ...	10,020	713 6 9	10,020	...	10,020	124 9 3	838 0 0	„ 1880.
	East Pencn Part only ...	42,580	5,302 6 6	42,580	640	41,940	620 6 5	5,922 12 11	„ 1875.

	West Do.	Nagulwari block	...	9,680	1,025	9	3	9,680	...	9,680	126	1	0	1,151	10	3	„	1878.
	Do. Do.	Paraspani „	...	8,240	348	3	11	8,240	...	8,240	107	4	0	455	7	11	„	1879.
	Do. Do.	Narhar „	...	39,040	1,196	3	7	39,040	...	39,040	482	6	0	1,678	9	7	„	1881.
Saugor Division ...	Garhakota	Whole	...	2,899	131	8	1	2,899	127	2,772	11	7	9	142	15	10	„	1875.
	Hathkho	Part only	...	10,598	2,242	5	6	10,598	700	9,898	310	14	9	2,553	4	3	„	1875.
	Rangir	„	...	1,897	160	7	4	1,987	...	1,987	51	13	0	212	4	4	„	1875.
	Ranipura	„	..	2,720	327	14	1	2,720	...	2,720	64	6	7	392	4	8	„	1879.
	Tigora	„	..	459	2	8	0	459	...	459	7	3	0	9	11	0	„	1879.
Wardha Division ...	Dhuga	Whole	...	6,171	1,320	0	4	14,171	400	13,771	584	2	5	1,904	2	9	„	1880.
	Erjhar	„	...	11,611				11,911	3,500	8,411							„	1880.
	Total 1st Class Reserves		...	8,82,626	1,43,209	8	2	9,06,701	39,991	8,66,710	17,029	3	3	1,60,238	11	5		
	2ND CLASS RESERVES.—Contd.																	
Saugor Division ...	Jalundhar	Whole	...	2,885	199	10	3	2,885	...	2,885	40	5	0	239	15	3	June	1880.
Balaghat Division ...	Pandratola	„	...	4,457	321	2	1	4,817	4	4,813	68	1	5	389	3	6	„	1872.
	Total 2nd Class Reserves		...	7,342	520	12	4	7,702	4	7,698	108	6	5	629	2	9		
	Grand Total		..	8,89,968	1,43,730	4	6	9,14,403	39,995	8,74,408	17,137	9	8	1,60,867	14	2		

Charged in previous years	...	1,34,707	9	4
Charged in 1883-84.	...	16,806	5	4
Charged in 1884-85	...	9,353	15	6
Total	...	1,60,867	14	2

Annual Form No. 52.—[Prescribed.]

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest Rules during 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
1st Class Reserves.														
Direction ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mandla Division ...	..	1	1	...	...	2	2	1	1	1	9	2	10	...
Hoshangabad " ...	...	1	1	...	...	2	2	2	2	..	...	2	2	...
Betul " ...	..	2	1	...	..	3	3	3	21	..	..	3	21	...
Nimar " ...	..	1	...	...	...	1	1	..	...	1	1	1	1	...
Chanda " ...	...	...	...	..	...	...	..	..	...	...	...	...	...	...
Seoni " ...	...	...	...	...	..	...	...	...	...	...	...	...	...	...
Saugor " ...	...	1	1	...	...	2	2	1	1	1	1	2	2	...
Wardha " ..	...	...	...	...	...	..	..	...	...	...	..	...	...	...
Total ...	...	6	4	...	...	10	10	7	25	3	11	10	36	...
2nd Class Reserves.														
Nagpur district ...	...	...	2	...	...	2	2	2	9	...	2	2	11	...
Bhandara " ...	...	2	28	3	3	36	36	33	72	3	12	36	84	...
Chanda " ...	...	...	53	...	...	53	53	45	108	8	15	53	123	...
Wardha " ...	...	..	5	6	..	11	11	9	11	2	3	11	14	...
Balaghat " ...	...	..	2	...	...	2	2	1	3	1	1	2	4	...
Jubbulpore " ...	...	5	44	9	1	59	59	45	107	14	70	59	177	...
Saugor " ...	.	...	...	4	...	4	4	4	8	...	...	4	8	...
Damoh " ...	..	...	6	5	2	13	13	10	22	3	3	13	25	...
Mandla " ...	..	...	24	1	..	25	25	20	43	5	18	25	61	...
Seoni " ..	...	...	13	...	...	13	13	9	22	4	8	13	30	...
Betul " ...	...	...	10	1	...	11	11	11	22	...	..	11	22	...
Chhindwara " ...	...	...	14	...	...	14	14	11	12	3	7	14	19	...
Hoshangabad " ...	...	..	29	1	2	32	32	25	43	7	44	32	87	...
Narsinghpur " ...	...	...	2	...	.	2	2	2	2	...	...	2	2	...
Nimar " ...	2	1	8	4	9	22	24	18	88	6	34	24	122	...
Raipur " ...	...	...	7	...	...	7	7	6	33	1	3	7	36	...
Sambalpur " ..	...	...	1	...	...	1	1	1	2	...	...	1	2	...
Bilaspur " ...	...	...	24	...	...	24	24	23	41	1	4	24	45	...
Total ...	2	8	272	34	17	331	333	275	648	58	224	333	872	...
Grand Total ...	2	14	276	34	17	341	343	282	673	61	235	343	908	...

Annual Form No. 52 A.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Prosecutions for breaches of Forest Rules during 1883-84.

Forest Division and Civil District.	Cases pending from 1882-83.	New cases of the year.				Total cases.	Disposed of during the year.									
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Compounded.		Acquitted.		Pending.		Cases in which the offenders were not detected.		Total.	
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
1st Class Reserves																	
Direction ...	.	..	...	...	...	...	...	...	...	..	...		...	...	..	...	...
Mandla ..	3	1	5	12	1	19	22	20	84	..	..	2	3	...	..	22	87
Hoshangabad ..	...	1	12	...	...	13	13	13	69	...	...	...	...	...	...	13	69
Betul ...	...	...	12	4	..	16	16	16	55	...	...	...	...	...	..	16	55
Nimar ...	.	4	32	116	3	155	155	152	218	..	...	..	...	3	..	155	218
Chanda ...	..	...	33	33	.	66	66	66	74	...	...	...	...	...	..	66	74
Seoni ...	.	...	5	7	...	12	12	12	127	...	...	..	...	...	..	12	127
Saugor ...	..	...	33	133	..	166	166	144	349	7	11	15	23	...	...	166	383
Wardha ..	..	..	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	3	6	132	305	4	447	450	423	976	7	11	17	26	3	...	450	1,013
2nd Class Reserves.																	
Nagpur ...	...	...	80	100	..	180	180	127	532	11	16	42	80	..	...	180	628
Bhandara ...	...	...	21	1	...	22	22	22	87	...	...	...	...	...	...	22	87
Chanda ..	..	...	440	1,185	...	1,625	1,625	1,325	888	15	16	285	...	...	...	1,625	904
Wardha ...	.	...	...	...	..	...	...	...	..	...	..	...	..	.	...	...	...
Balaghat ...	...	...	239	4	..	243	243	243	650	...	...	...	..	...	...	243	650
Jubbulpore ...	...	...	17	2	..	19	19	19	49	..	...	...	...	...	...	19	49
Saugor ...	...	...	571	562	...	1,133	1,133	816	1,986	32	66	285	826	...	..	1,133	2,878
Damoh ...	...	...	67	47	..	114	114	114	472	...	...	...	...	...	...	114	472
Mandla ...	...	...	147	290	...	437	437	437	887	...	...	...	...	...	.	437	887
Seoni ...	...	...	79	45	...	124	124	124	608	...	...	...	...	...	..	124	608
Betul ...	..	..	85	31	..	116	116	112	504	...	...	...	...	4	...	116	504
Chhindwara ...	...	.	341	16	...	357	357	357	524	.	...	..	...	...	.	357	524
Hoshangabad ...	...	...	98	9	3	110	110	103	180	...	...	7	...	...	...	110	180
Narsinghpur ...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
Nimar ...	...	2	114	37	3	156	156	154	626	.	...	...	...	2	...	156	626
Raipur ...	...	..	162	92	...	254	254	254	759	...	...	...	..	...	...	254	759
Sambalpur ...	..	.	4,153	309	2	4,464	4,464	4,432	6,472	12	12	..	..	19	...	4,464	6,484
Bilaspur ...	...	1	31	17	...	49	49	47	128	...	...	...	..	2	...	49	128
Total ...	...	3	6,645	2,747	8	9,403	9,403	8,687	15,352	70	110	619	906	27	..	9,403	16,368
Grand Total ...	3	9	6,777	3,052	12	9,850	9,853	9,110	16,328	77	121	636	932	30	...	9,853	17,881

Annual Form No.

FOREST DEPARTMENT,

Summary of Revenue and Expenditure

Budget Heads—Receipts.	Direction.	Balaghat District.	Betul Division.	Bhandara District.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency:—				
a. Timber	15 0 0	.....	5 0 0	2,110 13 0
b. Firewood and Charcoal ..	66 0 0	.....	.....	.....
c. Bamboos	.....	.....	.....	.....
d. Sandal-wood	.....	.....	.....	.....
e. Grass and other Minor Produce ...	298 13 3	192 4 11	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers...	.....	15,605 15 11	.....	.....
a. Timber	2 8 0	1,285 10 8	11,202 10 3	4,812 3 5
b. Firewood and Charcoal ...	.....	3,478 1 2	5,524 15 9	15,428 13 6
c. Bamboos	35 8 9	1,964 12 0	6,617 6 3	2,618 3 10
d. Grazing and Fodder grass ..	14 13 6	10,378 8 8	23,132 10 4	10,313 13 1
e. Other Minor Produce ..	0 4 0	3,526 11 7	8,290 9 0	1,810 8 8
III.—Confiscated drift and waif wood ...	.....	2 6 10	10 8 0	772 11 5
IV.—Revenue from forests not managed by Government—				
a. Duty on Foreign Timber and other forest produce ...	.....	.....	.....	.....
b. Revenue from Shared and Private Forests ...	.....	.....	.....	7,647 0 0
V.—Miscellaneous:—				
a. Fines and Forfeitures ..	1 0 0	163 10 10	404 14 6	412 11 0
b. Refunds	4 6 0	9 0 1	.....	.....
c. Other Sources	2,160 8 2	.....	1,732 14 0	2 12 0
Total Receipts ...	2,598 13 8	36,607 2 8	56,921 8 1	54,929 9 11

BUDGET HEADS.

I.—CONSERVANCY AND WORKS.

I.—Timber and other produce removed from the forests by Government agency:—				
a. Timber	.....	.....	.....	.....
b. Firewood and Charcoal ..	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....
d. Sandal wood ...	.....	.....	.....	.....
e. Grass and other Minor Produce ...	12 8 0	.....	.....	.....
II.—Timber and other produce removed from the forests by consumers or purchasers..	.....	8,174 14 4	9,033 1 5	7,046 14 3
III.—Confiscated drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government:—				
a. Duty on Foreign timber and other forest produce ..	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed by Government ...	.....	.....	.....	.....
VI.—Live stock, stores, tools and plant:—				
a. Purchase of Cattle ...	.....	.....	.....	.....
b. Feed and keep of Cattle ...	1,550 1 9	.....	.....	.....
c. Stores, Tools and Plant ...	120 0 4	.....	9 12 0	.....

53.—(Prescribed.)

CENTRAL PROVINCES.

of the different Divisions, for the year 1883-84.

Bilaspur District.	Chanda Division.	Ohhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore District.	Mandla Division.
Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	47,987 5 1	.....	.....	3,375 0 0	.....	6,652 6 0
.....	.....	.....	.....	140 0 0	.....	880 10 9
.....	674 10 11	.....	.....	.....	.....	1,694 13 8
.....	.....	.....	.....	.....	.....	.....
.....	2,174 8 0	.....	.....	105 15 9	.....	2,604 7 8
.....	13,178 5 9	.....	3,937 0 0	4,372 8 0	.....	.....
5,455 9 9	9,566 15 4	5,139 6 8	7,766 9 10	18,781 2 1	1,251 8 0	48 14 9
1,918 1 9	13,926 0 0	2,641 12 1	4,566 14 9	5,622 8 5	2,380 10 0	174 0 6
2,483 10 4	16,786 7 2	3,050 7 11	1,368 1 9	15,588 7 11	1,827 3 3	550 11 3
6,474 15 9	53,756 6 0	15,791 10 9	30,678 10 9	27,046 6 3	10,356 3 7	1,779 6 3
2,212 12 6	4,932 15 2	2,364 3 9	13,234 7 10	6,501 4 7	1,162 12 0	707 12 0
.....	.....	317 12 0	.....	1,310 12 10	168 1 5	6 12 6
.....	.....	.....	.....	.....	.....	.....
4,175 0 0	.....	.....	.....	.....	.....	.....
157 9 3	2 8 0	40 9 3	17 5 6	39 0 0	84 3 0	90 11 0
0 8 0	7 2 0	7 7 0	1 4 8	52 14 4	2 4 2	30 2 0
441 5 10	1,225 8 6	4 8 0	17 8 0	2,225 10 6	1,997 3 3	224 4 6
23,319 9 2	1,64,218 11 11	29,357 13 5	61,587 15 1	85,161 10 8	19,230 0 10	15,445 0 10
.....	33,444 1 11	.....	.....	.....	.....	7,262 3 5
.....	.....	.....	.....	.....	.....	384 7 5
.....	416 0 2	Nil.	Nil.	Nil.	Nil.	946 5 1
.....	.....	.....	.....	.....	.....	.....
.....	168 5 3	.....	.....	.....	.....	450 1 0
3,154 1 6	16,211 0 2	7,852 8 5	12,738 3 10	14,326 14 9	4,420 0 0	41 4 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	1,730 5 2	.....	.....	555 13 6	.....	1,436 11 1
.....	229 3 2	.....	.....	530 9 5	.....	186 10 0

Budget Heads—Receipts.	Mandla District.	Nagpur Division.	Narsinghpur District.	Nimar Division.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency:—				
a Timber	.....	.....	.....	0 12 0
b. Firewood and Charcoal ...	.....	.....	.....	11 0 0
c. Bamboos	.....	.....	.....	.....
d. Sandal-wood ...	.....	.....	.....	.....
e. Grass and other Minor Produce ..	4,987 2 9	.....	.....	325 7 3
II.—Timber and other produce removed from the forests by consumers or purchasers:—	12,799 14 1	.....	.....	5,626 10 3
a. Timber	414 8 5	4,582 3 5	4,635 5 9	13,524 8 4
b. Firewood and Charcoal ...	1,148 12 9	3,869 8 9	2,381 8 4	2,798 15 6
c. Bamboos	1,414 8 3	786 7 0	1,630 7 9	6,837 15 2
b. Grazing and Fodder grass ...	53,959 15 10	16,023 8 6	4,678 14 6	28,885 1 3
e. Other Minor Produce ...	11,052 13 7	3,149 0 0	860 2 0	2,315 10 1
III.—Confiscated drift and waif wood ...	172 0 5	986 13 0	16 6 0	297 0 2
IV.—Revenue from forests not managed by Government:—				
a. Duty on foreign Timber and other forest produce ..	.....	.....	.....	.....
b. Revenue from Shared and Private forests ...	.....	.....	.....	.....
V.—Miscellaneous:—				
a. Fines and Forfeitures ...	.....	662 4 6	233 4 0	43 0 0
b. Refunds	.....	24 9 1	.....	4 10 7
c. Other Sources	.....	134 10 4	2 2 8	4,109 1 9
Total Receipts ...	85,049 12 1	30,218 11 7	14,438 2 7	64,779 12 4

BUDGET HEADS.

I.—Conservancy and Works.

A.—Timber and other produce removed from the forests by Government agency:—				
a. Timber	.....	.....	.....	.....
b. Firewood and Charcoal ...	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....
d. Sandal wood	.....	.....	.....	.....
e. Grass and other Minor produce	1,057 11 3	.....	.....	222 2 9
II.—Timber and other produce removed from the forests by consumers or purchasers	14,176 2 9	7,305 13 6	3,251 13 2	12,910 15 3
III.—Confiscated drift and waif wood ...	.....	.....	.....	.....
IV.—Revenue from forests not managed by Government:—				
a. Duty on Foreign timber and other forest produce ..	.....	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....	.....
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....	251 7 0
VI.—Livestock, stores, tools and plant—				
a. Purchase of Cattle ...	.....	.....	.....	.....
b. Feed and keep of Cattle ...	.....	.....	.....	235 9 0
c. Stores, Tools and Plant ...	.....	40 11 0	.....	146 5 4

53.—(Prescribed.)—Contd.

Raipur District.	Sambalpur District.	Saugor Division.	Seoni District.	Wardha District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.
.....	.....	189 5 9	58 14 10	1,341 2 6	61,735 11 2
.....	.....	.....	22 8 0	223 12 4	1,343 15 1
.....	.....	.....	1,370 14 2	2 12 0	3,743 2 9
.....	.....	.....	.....	.....	.....
.....	.....	.....	101 1 6	2,723 9 9	13,513 6 10
10,825 12 0	.....	867 9 0	9,526 11 0	.....	76,740 6 0
7,163 14 8	15,310 13 5	5,994 13 2	8,228 13 9	1,560 10 6	1,26,728 14 2
4,536 8 7	.....	7,025 11 7	4,499 2 1	2,045 12 6	83,967 9 0
718 10 2	.....	2,883 9 9	12,489 5 4	10 13 0	79,662 12 10
20,938 14 4	.....	38,350 14 4	34,060 3 5	17,830 5 6	4,13,451 6 9
8,510 4 1[illegible]	.....	17,897 8 11	4,156 9 7	802 7 9	93,488 13 10
.....	.....	636 14 11	46 8 0	111 14 3	4,856 9 9
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.. ...	11,822 0 0
.....	3,600 4 6	2 0 0	.....	111 4 0	6,066 3 4
1 4 8	.....	129 12 9	.....	1 0 0	276 5 4
2,110 0 0	.....	721 2 1	201 11 2	61 1 9	17,372 0 1
54,805 5 3	18,911 1 11	74,699 6 3	74,762 6 10	26,826 9 10	9,94 769 4 11
.....	.....	3 6 0	98 10 0	142 5 0	40,950 10 4
.....	.....	.....	.....	1 0 0	385 7 5
.....	.....	.....	335 4 9	.....	1,697 10 0
.....	.....	.....	.....	.....	...
.....	.....	.....	94 8 4	787 15 9	2,793 4 4
8,443 5 0	4,608 4 11	13,923 13 2	10,585 8 5	5,170 12 10	163,975 7 8
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
... ..	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	251 7 0
.....	.....	.....	19 0 0	.....	19 0 0
184 4 9	.....	.....	129 3 5	391 9 9	6,213 10 5
.....	.....	159 6 0	14 8 0	70 12 0	1,507 13 3

BUDGET HEADS. A.—CONSERVANCY AND WORKS.	Direction.	Balaghat District.	Betul Division.	Bhandara District.
BUDGET HEADS.				
A.—CONSERVANCY AND WORKS.	Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.
VII.—Communications and Buildings :—				
a. Roads and Bridges ..	.....	.....	1,374 14 3	.....
b. Buildings ..	.....	.....	12 4 0	.....
c. Other Works ..	.....	.....	117 11 6	.....
VIII.—Demarcation, improvement and extension of forests :—				
a. Demarcation .	.....	2 7 0	664 13 5	.....
b. Compensation for Land and rights ..	.....	.....	.....	.....
c. Surveys and Working Plans ..	.....	.....	.....	.....
d. Plantations ..	.....	32 1 0	.....	.....
e. Protection from fire ..	135 13 6	61 4 7	1,116 12 2	.....
f. Other Works ..	54 0 0	.....	687 10 3	.....
IX.—Miscellaneous:—				
a. Refunds ..	.....	7 6 0	56 2 0	154 0 0
b. Law charges ...	.....	6 0 6	5 8 3	.....
c. Other charges ...	2,412 9 4	.....	68 12 6	.....
Total A.—Conservancy and Works ...	4,285 0 11	8,284 1 5	13,747 6 3	7,900 14 3
BUDGET HEADS.				
B.—ESTABLISHMENT.				
I.—Salaries :—				
a. Conservators ...	13,677 6 9	.....	.....	.....
b. Superior Officers .	7,361 15 4	1,050 0 0	6,034 8 3	.....
c. Subordinate Forest and Depot Establishments . .	1,066 14 10	896 0 0	2,203 15 5	.....
d. Office Establishments ..	4,556 4 5	.....	574 0 0	.....
e. Deputation and Special Allowances...	.....	.....	.....	.....
II.—Travelling Allowances :—				
a Conservators ...	1,297 6 0	....	.....	.....
b Superior Officers ...	369 9 0	343 4 0	1,112 0 0	.....
c. Subordinate Forest and Depot Establishments ..	.....	.....	.....	.....
d. Office Establishmentss ...	287 0 2	.....	79 13 8	.....
III.—Contingencies—				
a. Stationery ...	9 13 9	.....	9 10 0	.....
b. Carriage of tents and records ..	616 0 8	.....	550 0 3	.....
c. Rents, Rates and Taxes ..	540 0 0	.....	300 0 0	.....
d. Pay of Police Guards ..	.....	.....	.....	.....
e. Official Postage ...	285 8 0	93 3 6	252 11 0	130 15 0
f. Sundries ...	835 3 1	.....	155 9 6	.....
Total, B. Establishments ..	30,903 2 0	2,382 7 6	11,272 4 1	130 15 6
Grand Total of Expenditure ...	35,188 2 11	10,666 8 11	25,019 10 4	7,331 13 9

53.—(Prescribed.)—Contd.

Bilaspur District.	Chanda Division.	Chhindwara District.	Damoh District.	Hoshangabad Division.	Jubbulpore District.	Mandla Division.
Rs. a. p	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	365 15 4	.....	.....	468 13 0	.....	325 14 5
.....	158 9 3	87 12 0	5 3 6	119 10 0	5 9 6	254 15 11
.....	.....	.....	.....	0 8 0	.....	509 0 0
10 0 0	286 10 0	816 1 8	634 15 3	1,009 8 11	434 14 11	360 11 7
.....	.....	.....	.....	.....	.....	.....
.....	488 13 5	.....	.....	.....	.....	418 6 2
.....	.....	.....	.....	.....	.....	.....
.....	3,999 12 3	.....	.....	3,469 7 1	.....	2,496 14 10
.....	523 12 1	.....	122 7 5	261 12 9	.....	701 9 3
82 11 0	8 8 0	.....	11 0 0	5 12 0	116 13 0	14 4 9
.....	.....	.....	.....	6 13 0	.....	9 5 0
.....	14 11 9	.....	4 7 10	171 4 6	.....	348 1 1
3,246 12 6	58,045 11 11	8,706 6 1	13,516 5 10	20,926 14 11	4,977 5 5	16,146 13 0
.....	.....	.....	.....	.....	.....	.....
.....	10,483 0 1	.....	.....	10,800 0 0	.....	10,951 9 10
.....	5,578 8 3	.....	666 9 7	4,315 6 3	782 0 0	8,379 6 2
.....	1,196 7 0	.....	.....	669 0 0	.....	1,012 8 0
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	2,117 6 0	.....	.....	889 12 0	.....	1,286 7 0
.....	22 8 0	.....	.....	52 1 10	.....	802 11 5
.....	33 10 8	.....	.....	18 6 8	.....	147 4 6
.....	2 10 9	.....	.....	12 2 0	.....	88 2 3
.....	303 6 0	.....	.....	279 0 9	.....	618 8 1
.....	21 0 0	.....	.....	283 8 0	.....	310 0 0
.....	.....	.....	.....	.....	.....	.....
.....	403 12 6	44 7 0	0 3 6	249 3 6	13 12 6	143 5 0
.....	84 4 7	.....	.....	226 6 4	.....	377 12 3
.....	20,246 9 10	44 7 0	666 13 1	17,794 15 4	795 12 6	24,117 10 6
3,246 12 6	78,292 5 9	8,750 13 1	14,183 2 11	38,721 14 3	5,773 1 11	40,264 7 6

BUDGET HEADS. A.—Conservancy and Works.	Mandla District.	Nagpur Division.	Narsinghpur District.	Nimar Division.
BUDGET HEADS.				
A.—Conservancy and Works.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
VII.—Communications and Buildings:—				
a. Road and Bridges ...	.....	.....	.....	8 4 0
b. Buildings ...	.....	6 0 0	.....	623 0 4
c. Other Works ...	.....	.....	.....	39 12 0
VIII.—Demarcation, improvement and extension of forests:—				
a. Demarcation ..	273 8 2	344 10 8	848 12 8	2,210 11 0
b. Compensation for Land and Rights.	.....	.....	.....	.....
c. Surveys and Working Plans ...	.....	.....	.....	.....
d. Plantations ...	.....	.....	.....	216 0 0
e. Protection from fire ...	.....	.....	.....	2,542 9 6
f. Other Works ...	.....	.....	.....	1,067 1 0
IX.—Miscellaneous:—				
a. Refunds ...	97 10 7	0 6 4	.....	34 0 0
b. Law charges ...	.....	.....	.....	45 11 9
c. Other Charges ...	.....	.....	.....	53 5 8
Total A.—Conservancy and Works ...	15,605 0 9	7,697 9 6	4,100 9 10	20,606 14 7
B.—Establishments.				
I.—Salaries:—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers ...	.....	6,582 10 2	.....	13,519 5 8
c. Subordinate Forest and Depot Establishments ...	684 0 0	430 4 8	84 0 0	3,807 1 9
d. Office Establishments ...	.....	264 0 0	.....	1,197 9 9
e. Deputation and Special Allowance.	.....	.....	.....	.....
II.—Travelling Allowances—				
a. Conservators ...	.....	.....	.....	.....
b. Superior Officers ...	.....	1,129 2 0	.....	2,253 6 4
c. Subordinate Forest and Depot Establishments ...	.....	92 6 8	.....	73 11 0
d. Office Establishments ...	.....	67 2 11	.....	61 14 10
III.—Contingencies—				
a. Stationery ...	.....	2 14 0	.....	3 2 3
b. Carriage of tents and records ...	.....	305 11 2	.....	464 0 7
c. Rents, Rates and Taxes ...	.....	.....	.....	15 0 0
d. Pay of Police Guards ...	.....	.....	.....	.....
e. Official Postage ...	20 0 0	158 1 0	7 1 0	193 3 6
f. Sundries ...	.....	89 14 10	.....	332 14 10
Total, B. Establishments ...	704 0 0	9,122 3 5	91 1 0	21,921 6 6
Grand Total of Expenditure ...	16,309 0 9	16,819 12 11	4,191 10 10	42,528 5 1

53.—[Prescribed]—Contd.

Raipur District.	Sambalpur District.	Saugor Division.	Seoni Division.	Wardha District.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	9 8 0	2,553 5 0
.....	.....	36 13 6	122 5 0	87 2 0	1,469 5 6
.....	.....	.....	.....	4 0 0	670 15 6
.....	.....	83 3 0	11 8 0	465 13 5	8,458 5 8
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	907 3 7
.....	.....	4 8 0	.....	2 14 0	255 7 0
.....	.....	412 3 3	2,009 7 7	562 0 7	16,806 5 4
.....	.....	639 9 1	305 9 9	.....	4,363 7 7
68 7 0	8 0 0	.....	.....	45 8 0	710 8 8
.....	.....	.....	.....	.....	73 6 6
.....	.....	1 4 7	14 4 0	100 2 8	3,188 15 11
8,696 0 9	4,616 4 11	15,264 2 7	13,739 13 3	7,841 8 0	2,57,251 12 8
.....	.....	.....	.....	.....	13,677 6 9
1,800 0 0	.....	7,200 0 0	11,061 4 7	2,741 10 8	89,586 0 7
672 0 0	.....	1,599 0 6	5,479 7 0	1,821 13 11	38,466 8 4
56 0 0	.....	324 0 0	670 8 4	.....	10,520 5 6
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	1,297 6 0
512 4 0	.....	898 4 0	641 0 0	503 14 10	12,056 5 2
.....	.....	.....	.....	111 0 0	1,154 6 11
14 14 4	.....	9 14 10	80 6 7	.....	800 9 2
.....	.....	.....	21 7 0	1 5 0	151 3 0
63 0 0	.....	391 12 10	378 10 0	.....	3,970 2 4
.....	.....	200 0 0	300 0 0	.....	1,969 8 0
.....	.....	.....	.....	.....	.....
20 5 6	53 5 0	363 14 9	87 13 6	22 14 6	2,543 12 9
108 0 0	.....	208 12 11	168 13 5	24 3 1	2,611 14 10
3,246 7 10	53 5 0	11,195 11 10	18,889 6 5	5,226 14 0	1,78,805 9 4
11,942 8 7	4,669 9 11	26,459 14 5	32,629 3 8	13,068 6 0	4,36,057 6 0

Calcutta
The 11th June 1884.

G. J. VANSOMEREN,
Asst. Comptroller General (Forests.)

Annual Form No. 54—(Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Dr. **Account Current for the year 1883-84.** Cr.

	Rs.	a.	p.	Rs.	a.	p.
To Cash Balance				3,745	0	4
„ Revenue as per Annual Summary (Form No. 53.)				9,94,769	4	11
„ Service Funds						
Military Fund, Bengal ...	243	0	0			
Do. Do. Madras ...	109	11	9			
Military Orphan Fund, Bengal ...	210	0	0			
Uncovenanted Service Family Pension Fund, Bengal	2,700	9	0			
General Family Pension Fund ...	630	0	0			
				3,893	4	9
„ Deposits				1,659	8	10
„ Forest Cash Remittances (Local).						
Remittances from State Treasuries ...	4,15,373	12	5			
Inter Divisional Transfers ...	22,714	15	9			
				4,38,058	12	2
„ Advances Recoverable				2,09,529	9	3
„ Suspense				1	2	1
„ Account Current (other Governments)—						
Remittance from Government of India ...	173	4	6			
Do. From Government of Bombay ..	650	0	0			
Do. From Government of N. W. P. and Oudh	2,673	2	7			
				3,496	7	1
Inter Departmental Transfers ...						
Civil Department—						
Jails	986	6	0			
Mathematical Instrument Department ...	134	14	0	1,121	4	0
Total ...				16,56,304	5	5

	Rs.	a.	p.	Rs.	a.	p
By Expenditure as per Annual Summary (Form No. 53)	.....			4,36,057	6	0
„ Deposits	.....			1,787	3	2
„ Forest Cash Remittances (Local)—						
Remittances to State treasuries ...	9,42,127	4	2			
Inter Divisional transfers ...	24,002	2	10			
				9,66,129	7	0
„ Advances Recoverable	.....			2,06,918	6	10
„ Suspense	.....			1	2	0
„ Account Current (other Governments—						
Remittance to Government of India ...	936	10	8			
Do. to Government of Bombay ...	379	4	0			
Do. to Government of N. W. P and Oudh.	125	0	0			
				1,440	14	8
„ Inter Departmenal Transfers—						
Public Works Department State Railways...						
Wardha Coal State Railway ...	20,486	9	2			
Nagpur and Chhattisgarh State Railway ...	17,797	12	7			
Other Branches	699	10	6			
Civil Department—						
Jails ... 234 2 11						
Education ... 57 8 0	291	10	11			
Post Office	41	0	0	39,316	11	2
„ Cash Balance	.....			4,653	2	7
Total...				16,56,304	5	5

Calcutta:
The 11th June 1884.

G. J VANSOMEREN,
Asst. Comptroller General (Forests.)

Annual Form No. 55.—(Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Outstandings and Liabilities on account of Contractors and Disbursers for 1883-84.

Division.	Department Debtor.			Department Creditor.			Balance due.		Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings.)	By Department (Liabilities.)	
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction ...	...	8,497 15 4	8,497 45 4	251 0 6	8,671 15 10	8,923 0 4	425 1 0	...	
Balaghat District ...	...	35 0 0	35 0 0	25 0 0	35 0 0	60 0 0	25 0 0	...	
Betul Division ...	...	14,055 0 7	14,055 0 7	484 14 8	13,652 5 2	14,137 3 10	82 3 3	...	
Bhandara District ...	...	250 0 0	250 0 0	.....	250 0 0	250 0 0	.....	...	
Chanda Division ...	...	65,844 1 5	65,844 1 5	22,562 12 8	62,722 5 5	85,285 2 1	19,441 0 8	...	
Chhindwara District ...	...	8,767 0 0	8,767 0 0	2 2 1	8,764 13 11	8,767 0 0	.....	...	
Damoh District ...	...	.....	.....	.....	50 0 0	50 0 0	50 0 0	...	
Hoshangabad Division ...	...	21,027 7 9	21,027 7 9	1,110 10 0	20,421 13 0	21,532 7 0	504 15 3	...	
Jubbulpore District ...	...	4,908 13 10	4,908 13 10	3 6 4	4,920 5 0	4.923 11 4	14 13 6	...	
Mandla Division ...	...	19,008 4 2	19,008 4 2	872 6 6	18,916 3 7	19,788 10 1	780 5 11	...	
Mandla District ...	...	2,212 2 4	2,212 2 4	.....	3,284 14 1	3,284 14 1	1,072 11 9	...	
Nagpur Division ...	...	7,499 11 8	7,499 11 8	155 15 2	7,545 10 10	7,701 10 0	201 14 4	...	
Nimar Division ...	...	26,974 14 1	26,974 14 1	991 2 0	27,147 12 10	28,138 14 10	1,164 0 9	...	
Raipur District ...	...	128 2 11	128 2 11	108 2 11	20 0 0	128 2 11	.....	...	
Saugor Division ...	...	9,074 14 7	9,074 14 7	272 7 5	9,122 7 10	9,394 15 3	330 5 6	10 4 10	
Seoni Division ...	...	18,764 3 4	18,764 3 4	606 6 1	18,871 15 4	19,478 5 5	744 2 1	...	
Wardha District ...	...	2,481 13 3	2,481 13 3	509 7 5	2,520 12 0	3,030 3 5	548 6 2	...	
Total ...	...	2,09,529 9 3	2,09,529 9 3	27,955 13 9	2,06,918 6 10	2,34,874 4 7	25,355 0 2	10 4 10	

Calcutta:

The 11th June 1884.

G. J. VANSOMEREN,

Asst. Comptroller General (Forests).

Annual Form No. 56.—(Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Revenue received and outstandings on account of revenue during 1883-84.

Division.	Particular.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Direction ...	Timber and other produce	.....	2,598 13 8	2,598 13 8	2,598 13 8	.....	
Balaghat District ..	Ditto ..	.....	36,607 2 8	36,607 2 8	36,607 2 8	.....	
Betul Division ..	Ditto ...	42 13 10	57,256 14 2	57,299 12 0	56,943 9 6	356 2 6	
Bhandara District ..	Ditto ...	.....	54,929 9 11	54,929 9 11	54,929 9 11	.....	
Bilaspur District ...	Ditto ...	.....	23,319 9 2	23,319 9 2	23,319 9 2	.....	
Chanda Division ...	Ditto ...	2,496 0 1	1,61,778 3 1	1,64,274 3 2	1,64,274 3 2	.....	
Chhindwara District ..	Ditto ...	.....	29,357 13 5	29,357 13 5	29,357 13 5	.....	
Damoh District ...	Ditto ...	.....	61,587 15 1	61,587 15 1	61,587 15 1	.....	(a) Realizations as per Form No. 53—
Hoshangabad Division ...	Ditto ...	.....	85,161 10 8	85,161 10 8	85,161 10 8	.....	Rs. a. p.
Jubbulpore District ...	Ditto ...	.....	19,230 0 10	19,230 0 10	19,230 0 10	.....	994,769 4 11
Mandla Division ..	Ditto ...	382 9 5	15,062 7 5	15,445 0 10	15,445 0 10	.....	Writter off under Government orders 257 1 5
Mandla District ...	Ditto ..	.....	85,949 12 1	85,949 12 1	85,949 12 1	.....	
Nagpur Division ..	Ditto ...	829 12 0	29,651 15 7	30,481 11 7	30,453 11 7	28 0 0	Reduction allowed under explanation 55 7 3
Narsinghpur District ...	Ditto ...	.....	14,438 2 7	14,438 2 7	14,438 2 7	.....	
Nimar Division ..	Ditto ...	.....	64,779 12 4	64,779 12 4	64,779 12 4	.....	
Raipur District ..	Ditto ...	.....	54,805 5 3	54,805 5 3	54,805 5 3	..	Total Col. 4 9,95,081 13 7
Sambalpur District ..	Ditto ...	.....	18,911 1 11	18,911 1 11	18,911 1 11	.....	
Saugor Division ..	Ditto ...	.....	74,699 6 3	74,699 6 3	74,699 6 3	.....	
Seoni Division ..	Ditto ...	.....	74,762 6 10	74,762 6 10	74,762 6 10	.....	
Wardha District ..	Ditto ..	.....	26,826 15 0	26,826 15 0	26,826 9 10	0 5 2	
	Total ...	3,751 3 4	9,91,715 1 11	9,95,466 5 3	(a) 9,95,081 13 7	384 7 8	From Public Department Nil. „ Private purchasers 384 7 8 Total Rs. 384 7 8

Calcutta.

The 11th July 1884.

G. J. VANSOMEREN,

Asst. Comptroller General (Forests).

FORM No. 57.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Financial Result of the year 1883-84.

Division.	Timber and other produce removed from forest by Government agency.		Other Revenues.		Formation, improvement and protection of forest.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction ...	380	36	2,219	1,254	2,625	2,599	3,915	
Mandla Division ..	11,832	13,433	3,613	975	28,917	15,445	43,325	
Betul do. ...	5	...	13,342	3,016	7,780	13,347	10,796	
Hoshangabad do. ...	3,621	50	23,150	7,143	9,634	26,771	16,827	
Nimar do. ...	337	672	22,355	7,256	12,771	22,692	20,699	
Chanda do. ...	44,146	39,562	22,324	5,678	10,159	66,470	55,399	
Seoni do. ...	1,553	997	22,160	7,823	8,250	23,713	17,070	
Saugor do. ...	189	484	8,562	2,808	3,289	8,751	6,581	
Total ...	62,063	55,234	1,17,725	35,953	83,425	1,79,788	1,74,612	
Nagpur Division ..	...	...	30,219	12,314	5,456	30,219	17,770	
Bhandara do. ...	2,111	...	52,819	7,666	616	54,930	8,282	
Chanda do. ...	6,690	995	91,059	19,568	6,341	97,749	26,904	
Wardha do. ...	4,291	1,843	22,535	8,230	3,945	26,826	14,018	
Balaghat do. ...	192	...	36,415	9,779	1,838	36,607	11,617	
Jubbulpore do. ...	...	...	19,230	5,210	1,113	19,230	6,323	
Saugor do. ..	...	...	65,948	17,659	4,770	65,948	22,429	
Damoh do. ...	...	...	61,588	13,492	1,641	61,588	15,133	
Seoni do. ...	...	...	51,049	13,250	4,859	51,049	18,109	
Mandla do. ...	4,987	1,058	80,963	14,673	1,528	85,950	17,259	
Betul do. ..	...	...	43,574	12,467	4,306	43,574	16,773	
Chhindwara do. ...	...	...	29,358	8,290	1,411	29,358	9,701	
Hoshangabad do. ...	...	...	58,391	18,005	6,440	58,391	24,445	
Narsinghpur do. ...	...	...	14,438	3,552	1,240	14,438	4,792	
Nimar do. ...	...	...	42,088	14,931	10,849	42,088	25,780	
Raipur do. ..	...	...	54,805	8,898	2,219	54,805	11,117	
Sambalpur do. ...	...	...	18,911	5,455	779	18,911	6,234	
Bilaspur do. ...	...	...	23,320	4,023	736	23,320	4,759	
Total ...	18,271	3,896	796,710	197,462	60,087	8,14,981	2,61,445	
Grand Total ..	80,334	59,130	914,435	2,33,415	1,43,512	9,94,769	4,36,057	

Annual Form No. 58.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Trees felled by Government Agency during the year 1883-84.

Divisions.	Trees felled.		Remarks.
	Description.	Number.	
Mandla ...	Saj trees ...	547	
Chanda ...	Teak trees ...	922	
	Saj trees ...	171	
	Amli trees ...	68	
	Bhera trees ...	20	
	Chichwa trees ...	72	
	Dhaora trees ..	962	
	Garrari trees ...	8,225	
	Mokha trees ...	17	
	Seena trees ...	22	
	Tendu trees ...	525	
	Unreserved trees ...	3,000	
Saugor ...	Teak trees ...	239	
Wardha ...	Teak trees ...	3,745	
	Total ...	18,535	

NOTE.—The following were felled in excess of the above, *vide* explanation given in para. 147 of Report :—

Teak—Injured and decaying trees...	5,457
Saj—Poles ...	20,000
Total ...	25,457

FORM No. 59.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Out-turn of Timber and other produce cut and collected by Government Agency during the year 1883-84.

Division.	How obtained.	Produce cut and collected.			Remarks.
		Description.	Number or quantity.	Cubic feet, &c.	
Direction ...	By collection ...	Lac ...	17	Maunds.	
	Do. ...	Firewood ...	915	Do.	
		Total ...	932	...	
Mandla ...	By selection felling...	Sal logs ...	28	563	
	By sawing ...	Sal sleepers 10×10×5 ...	2,260	7,894	
	Do. ...	Sleepers ...	42	81	
	Do. ...	Sal scantlings ...	2,170	9,229	
	By fallen trees ...	Teak logs ...	22	308	
	By sawing ...	Sal furdas ...	192	...	
	By fallen wood ...	Dammin wood ...	1	...	
	Do. ...	Mulgaws ...	13	...	
	Do. ...	Satcutta mulgaws ...	6	...	
	Found in raft ...	Bullies ...	141	...	
	Coppicing ...	Teak poles &c. ...	905	...	
	Do. ...	Teak bullies ...	420	...	
	By felling ...	Sal bullies ...	250	...	
		Boats ...	4	...	
		Total Timber ...	6,521	18,075	
	By collection ..	Firewood ...	12,215	Maunds.	
	Ditto ...	Ditto ...	263	Hd loads.	
	Burnt ...	Charcoal ...	100	Maunds.	
	By collection ...	Bambus ...	227,793		
	Do. ...	Hides ...	17		
	Do. ...	Hurra ...	1,170	Maunds.	
	Do. ...	Teekur ...	70	Do.	
	Do. ...	Rall ...	4	Do.	
	Do. ...	Lac ...	2	Do.	
	Do. ...	Potatoes ...	1	Do.	
	Do. ...	Mohwa oil ...	1	Do.	
	Do. ...	Mohwa ...	222	Do.	
	Do. ...	Moolain ropes ...	5	Bundles.	
	Do. ...	Chironji ...	1	Maund.	
	Do. ...	Stag Horns ...	345	...	
	Do. ...	Waif wood ...	13	Pieces.	
	Do. ...	Grass ...	6,62,050	Poolas.	
		Total ...	9,04,278	...	
Hoshangabad ...	Coppicing badly grown teak trees...	Teak stumps ...	5,368	...	
	Do. ...	Teak Choolias ...	1,283	...	
	Do. ..	Teak Sukties ...	3,775	...	
	Do. ...	Teak Khakers ...	727	...	
		Total Timber ...	11,151	...	
	By collection ...	Firewood ...	264	Ct. loads	
	Do. ...	Mohwa ...	1	Maund.	
	Do. ...	Hides ...	20	...	
	Do. ...	Grass ...	6,750	Poolas.	
		Total ...	7,035	...	

FORM No. 59—Contd.

Division.	How obtained.	Produce cut and collected.			Remarks.
		Description.	Number or quantity.	Cubic feet, &c.	
Nimar ...	By collection ..	Lac ...	2	Maunds.	
	Ditto ...	Chironji ...	1	Do.	
	Ditto ...	Mohwa ...	24	Maunds.	
	Ditto ...	Hides ...	28		
	Punasa Garden ...	Gram ...	5	Maunds.	
	Kirgaon Nursery ...	Tilli ...	18	Do.	
	Ditto ...	Gram ...	35	Do.	
	Ditto ...	Jawar ...	21	Do.	
	Ditto ...	Urud ...	15	Do.	
	Ditto ...	Kurbi (Jowar stalks) ...	800	Bundles.	
	Ditto ...	Water melons ...	55		
	Ditto ..	Pumpkins ...	100		
	Ditto ...	Oranges ...	85		
	Ditto ..	Vegetables ...	20	Hd. loads	
	Ditto ...	Carrots ...	2	Maunds.	
	Ditto ...	Cauliflowers ...	4	Plants.	
	Ditto ...	Cucumbers ...	8		
	Ditto ...	Plantains ...	54		
	Ditto ...	Lauki ...	1		
	Ditto ..	Grass ...	50,000	Poolas.	
		Total ...	51,284	...	
Chanda ...	From Govt. Forest...	Teak logs ...	2,327	24,010	
	From Zamindari Forest ...	Ditto ...	284	4,030	
	Excess found ...	Ditto ...	341	1,405	
	From Govt. Forest...	Ditto ...	911	10,781	
	Ditto ...	Saj logs ..	174	2,144	
	Excess found ...	Saj logs ...	705	...	
	Outturn from mills...	Teak sleepers ...	6,817	11,354	
	Ditto ...	Saj sleepers ...	1,348	2,245	
	Ditto ..	Teak planks ..	1,021	323	
	Ditto ..	Teak scantlings ..	5,438	5,513	
	Ditto ..	Teak furdays or slabs ...	4,035	16,257	
	Ditto ...	Saj broad gauge sleepers ...	100	347	
	Ditto ...	Teak fellies ...	260	...	
	Excess found ...	Saj planks ..	2	...	
	From Mohurli Forest.	Ascoods ...	8,821		
	Ditto ..	Behra logs ...	20	65	
	Ditto ...	Ayn and Beejasal mayals ...	3	46	
	Ditto ..	Teak moondas ...	1	...	
	Excess found ...	Jungle wood scantlings ..	1	...	
	From Mohurli Forest.	Khakers ..	5,785	...	
	Ditto ...	Satin logs ...	30	96	
	By conversion ...	Brake blocks ..	9	...	
	From Mohurli Forest	Dhooras ...	235	...	
	Do. ...	Haris ...	305	...	
	By collection ...	Wood piece ..	1	...	
	From Mohurli Forest	Dhowra and Garari props ..	7,258	23,404	
	Do. ..	Dhowra props ...	34	105	
	Do. ...	Mokha props ...	17	63	
	Do. ..	Tendu props ...	183	614	
	Do. ...	Seena props ...	14	44	
	Do. ...	Aoula props ...	43	170	
	From Govt. Forest..	Dhowra props ...	14	37	
	Do. ...	Tendu props ...	73	242	
	Do. ...	Seena props ...	8	24	
	Do. ...	Aoula props ...	25	87	
		Total Timber ...	46,650	1,03,412	

FORM No. 59.—Contd.

Division.	How obtained.	Produce cut and collected.			Remarks.
		Description.	Number or quantity.	Cubic feet, &c.	
Chanda—Contd.	From Mohurli Forest	Lac ...	5	Maunds.	
	Do. ..	Hurra ...	244	Do.	
	Do. ...	Horns ...	445	...	
	Do. ...	Honey ...	1	Maunds.	
	By collection ...	Tolies ...	13	Do.	
	From Rambag Garden ...	Lemons ...	1,200	...	
	Do. ...	Fruits ...	710	...	
	By collection ...	Mohwa seeds ...	1,678	Maund.	
	From Mohurli and Taroba Forest ...	Bambus ...	24,646	...	
	From Warora depot compound ...	Grass ..	16,975	Poolas.	
		Total ...	45,917	...	
Seoni ..	Collected dead wood.	Teak poles ...	1	...	
	Do. ...	Tendu poles ...	2	...	
	Do. ...	Refused teak pieces ...	5	Ct. loads.	
		Total Timber ...	8	...	
	From fallen wood ...	Fuel ..	90	Ct. loads.	
	From cutting ...	Bambus ..	57,464	...	
	Do. ...	Grass ..	49,750	Pooals.	
		Total ...	107,304	...	
Saugor ...	From dead trees in the forest ...	Teak poles ...	239	...	
	Do. ...	Unclassed wood ..	44	...	
		Total Timber ...	283	...	
Wardha ...	By cutting ...	Teak poles ...	4,213	...	
	Do. ...	Teak bits ...	43	...	
	By collection ...	Timber ...	8	Bundles.	
	Do. ..	Teak pieces ...	89	...	
		Total Timber. ...	4,353	...	
	Do. ...	Fuel ...	240	Maunds.	
	Do. ...	Do. ...	99	Ct. loads.	
	Do. ...	Do. ...	5	H. loads.	
	Do. ..	Do. ...	14	Bundles.	
	Do. ...	Charcoal ...	2	H. loads.	
	Do. ...	Berkanus ..	17,137	...	
	Do. ...	Bambus ...	25	...	
	Do. ...	Grass ..	231,118	Poolas.	
	Do. ...	Gum ...	16	Maunds.	
	Do. ...	Mohwa ...	52	Do.	
	Do. ...	Honey ...	1	Do.	
	Do. ...	Char ..	1	Do.	
	Do. ..	Chironji ...	2	Do.	
	Do. ..	Skin ..	1	...	
	Do. ...	Horns ...	29	Karas loads &c.	
		Total ...	248,742	...	
		Grand Total ...	14,34.458	1,21,487	

FORM No. 59.—Contd.

Division.	Produce cut and collected.				Remarks.
	How obtained.	Description.	Number or quantity.	Cubic feet &c.	
		Abstract of the Province.			
		Teak logs	3,895	40,534	
		Sal logs	28	563	
		Logs other than teak and sal ...	932	2,351	
		Teak sleepers	6,817	11,354	
		Sal sleepers	2,309	7,975	
		Sleepers other than teak and sal ...	1,448	2,592	
		Teak scantlings	5,438	5,513	
		Sal scantlings	2,170	9,229	
		Scantlings other than teak and sal.	1	...	
		Teak planks	1,021	323	
		Saj planks	2	...	
		Teak furdays	4,035	16,257	
		Salfurdays	192	...	
		Junglewood props	7,666	24,796	
		Teak pieces and poles, &c. ...	17,382	...	
		Do. cartloads	5	...	
		Sal poles and pieces	250	...	
		Poles and pieces other than teak and sal	32,513	...	
		Do. bundles	8	...	
		Boats	4	..	
		Total ...	86,116	1,21,487	
		Firewood, cartloads	453	...	
		Do. headloads	268	...	
		Do. bundles	14	...	
		Do. maunds	13,370	...	
		Charcoal Headloads	2	...	
		Do. Maunds	100	...	
		Bambus	3,09.928	...	
		Grass pullahs	10,16,643	...	
		Other minor produce jothi loads ...	29	...	
		Do. Bundles ...	5	...	
		Do. Maunds ...	3,534	...	
		Farm crops and produce of Forest gardens	2,223	...	
		Do. headloads ...	20	...	
		Do. bundles ...	800	...	
		Do. maunds ...	97	...	
		Hides and skins	66	...	
		Horns	790	..	
		Total ...	13,48,342	...	
		Grand Total ...	14,34,458	1,21,487	

FORM No. 60.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Timber and other produce received from Forests in sale depots during the year 1883-84.

Divisions.	Depots.	Produce received.			Remarks.
		Description.	Number or quantity.	Cubic feet, &c.	
Mandla ..	Gwarighat ...	Sal sleepers 10×10×5 ...	1,507	5,238	
		Do. 6×8×5 ...	47	78	
		Sal scantlings ...	158	193	
		Sal logs ...	2	59	
		Teak logs ...	22	308	
		Teak bulle ...	1	...	
		Satkutla mulgaws ...	6	...	
		Sal furdays ...	3	..	
		Sal bullees ...	57	...	
		Bulloes ...	141	..	
		Boat ...	1	...	
		Bambus ...	8,967	...	
		Bambu lot ...	1	...	
		Molain ropes ...	5	Bundles.	
Chanda ...	Warora ...	Teak logs ...	37	913	
		Teak scantlings ...	1,434	1,117	
		Teak planks ...	5,222	2,381	
		Teak sleepers ...	2,293	3,820	
		Saj broad gauge sleepers ...	3,782	13,130	
		Behra logs ...	20	65	
		Ayn and Beejasal mayals ...	3	46	
		Teak moondas ...	1	...	
		Saj planks ...	152	139	
		Satin logs ...	30	96	
		Wood pieces ...	3	...	
		Tendoo props ...	256	856	
		Seena props ...	22	69	
		Aoula props ...	68	264	
		Dhaora props ..	45	142	
		Mokha props ...	17	63	
		Harris ..	305	...	
		Dhooras ...	235	...	
		Teak poles ...	129	...	
		Teak Brake block ...	9	...	
		Dhowra and Garrari props ...	7,258	23,403	
		Ascoods ...	8,635	...	
		Bamboos ...	24,268	...	
		Teak fellies ...	261	...	
		Grass ...	16,075	Poolas.	
Wardha ...	Arvi ...	Teak poles ...	1,501	...	
		Ascoods ...	20	...	
		Berkanas ...	17,137	...	
		Teak bits ...	3	...	
		Timber ...	8	Bundles.	
		Teak pieces ...	89	...	
		Fuel ...	36	Cart loads.	
		Do. ...	14	Bundles	
		Grass ...	106,338	Poolas.	
		Gum ...	2	Maunds.	
		Honey ...	1	Do.	
		Mohwa ...	13	Do.	
		Thorns ...	12	Karas loads.	

FORM No. 60.—Contd.

Divisions.	Depots.	Produce received.			Remarks.
		Description.	Number or quantity.	Cubic feet. &c.	
Wardha	Wardha	Teak poles ...	1,188	...	
		Teak bits ...	36	...	
		Fuel ...	724	Maunds.	
		Grass ...	97,608	Poolas.	
		Gum ...	13	Maunds.	
		Chironji ...	2	Do.	
		Mohwa ...	37	Maunds.	
		Thorns ...	13	Karas loads.	
		Total ...	307,173	52,380	
		ABSTRACT.			
		Teak logs ...	59	1,221	
		Sal logs ...	2	59	
		Logs other than teak and sal ..	53	207	
		Teak sleepers ..	2,293	3,820	
		Sal sleepers ...	1,554	5,316	
		Sleepers other than teak and sal ...	3,782	13,130	
		Teak scantings ...	1,434	1,117	
		Sal scanthlings ...	158	193	
		Teak planks ...	5,222	2,381	
		Planks other than teak and sal ...	152	139	
		Teak poles and pirces ..	3,218	...	
		Sal poles and pieces ...	60	...	
		Poles and pieces other than teak and sal ...	26,482	...	
		Do. bundles ...	8	...	
		Junglewood props ...	7,666	24,797	
		Boat ..	1	...	
		Total Timber ...	52,144	52,380	
		Firewood Maunds ...	724	...	
		Do. Cart loads ..	36	..	
		Do. Bundles ..	14	...	
		Bambus ...	33,235	...	
		Do. Lot ...	1	...	
		Grass Pooals ...	220,921	...	
		Molain ropes Bundles ...	5	..	
		Thorns Jotiloads ..	25	...	
		Other minor produce Maunds ...	68	...	
		Total ..	255,029	...	
		Grand Total ...	307,173	52,380	

FORM No. 61.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Sale of timber and other produce cut and collected by Government agency during the year 1883-84.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		Sold from depot.			
Mandla ...	Gwarighat ...	Sal sleepers 10 × 10 × 10 ...	11	87	
		Sal scantlings ...	392	621	
		Sal logs	1	42	
		Teak logs	22	308	
		Sal pieces	3	...	
		Teak Bullies	60	...	
		Sal Bullies	57	...	
		Ropes, bundles	5	...	
		Boats	12	...	
		Bambu, lot	1	...	
		Bambus	13,017	...	
Chanda ...	Warora ...	Teak furdays	60	253	
		Teak scantlings	1,314	1,205	
		Teak planks	672	435	
		Dhowra and Garari props ...	7,268	23,414	
		Behya logs	20	66	
		Ayen and beejasal mayals ..	14	96	
		Saj planks ...	807	329	
		Saj, broad guage sleepers ...	1,114	3,867	
		Satin logs	30	96	
		Dowra props	45	142	
		Tendoo props	256	856	
		Seena props	22	69	
		Aonla props	68	264	
		Mohka props	17	63	
		Dhooras	245	...	
		Ascood	3,210	..	
		Teak fellies	32	...	
		Spokes	143	...	
		Naves	1	...	
		Khakers	32	...	
		Teak poles	119	...	
		Haris	188	...	
		Wood piece	1	...	
		Grass, poolas	16,975	...	
		Bambus	16,718	...	
Wardha ...	Arvi	Teak poles	1,228	...	
		Teak fellows	2	...	
		Teak scantlings	16	...	
		Dhooras	91	...	
		Ascoods	12	...	
		Berkanas	15,237	...	
		Teak pieces	36	...	
		Teak bits	4	...	
		Fuel, maueds	3	...	
		„ cart loads	36	...	
		„ bundles	20	...	
		Charcoal, maunds	3	...	
		Bambus	135	...	
		Grass poolas	73,326	...	
		Gum, maunds	3	...	
		Kosa	127	...	
		Honey, maund	1	...	
		Mohwa, maunds	13	...	
	Wardha ...	Teak poles	1,060	...	
		Dhooras	2	...	

FORM No. 61.—contd.

Division.	Depot or locality.	Produce sold.			Remarks
		Description.	Number or quantity	Cubic feet.	
		Teak bits ...	36	...	
		Fuel, maunds ...	630	...	
		Charcoal do. ...	6	...	
		Bambus ...	13	...	
		Grass, poolas ..	90,157	...	
		Gum, maunds ...	13	...	
		Bhibas, do. ...	2	...	
		Chironji, do. ...	2	...	
		Mohwa, do. ...	37	...	
		Thorns karas loads ...	11	...	
		Total sales from depots ...	2,46,320	32,413	
		Sold locally.			
Direction ...	Telinkheri garden ...	Fuel maunds ...	702	...	
	Hathibari ...	Lac do. ...	32	...	
	Do. ...	Cart wheels, pairs ...	2	...	
Mandla ...	Mandla ...	Sal furdays ...	189	...	
		Bambus ...	5,400	...	
		Teekur maunds ...	3	...	
		Teak logs ...	1	7	
		Ral maunds ...	3	...	
		Waif wood pieces ...	13	...	
	Mocha ...	Boats ...	4	...	
	Bunjar Valley Forest.	Sal furdays ...	180	...	
		Hides ...	17	...	
		Potatoes maunds ...	1	...	
		Dhamun bullees ...	1	...	
	Barela ...	Bambus ...	1,17,998	...	
		Harra, manunds ..	29	...	
		Fuel do. ...	6,798	...	
		Mohwa do. ...	4	...	
		Mulgas ...	13	...	
	Lower Gour ...	Bambus ...	14,489	...	
		Fuel maunds ..	522	...	
		Do. head loads ...	263	...	
		Grass bundles ...	2,00,887	...	
		Teak poles ...	965	...	
		Mohwa maunds ...	10	...	
		Charcoal maunds ..	100	...	
	Bijeragogarh ...	Bambus ...	25,672	...	
		Stag Horns ...	15	...	
		Sal logs ...	26	421	
		Sal sleepers ...	59	109	
		Sal bullees ...	50	...	
		Mohwa maunds ...	200	...	
		Chironji Do. ...	1	...	
		Mohwa oil Do. ...	1	...	
		Lac Do. ...	1	...	
	Singrampur ..	Bambus ...	5,577	...	
		Teak bullees ...	1,793	...	
		Fuel maunds ...	5,048	...	
		Lac Do. ...	1	...	
	Jagamundal ...	Teekur Do. ...	7	...	
		Stag horns ...	70	...	
	Phen Block ...	Teekur maunds ...	47	...	
		Stag Horns ...	180	...	
	Topla ...	Teekur maunds ...	20	...	
	Halon Range ..	Hurra maunds ...	556	...	
	Phen Range ...	Hurra maunds ...	600	...	
	Kisli ...	Sal scantlings ...	834	3,401	

FORM No. 61.—contd.

Division	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
Betul ...	Badnoor ...	Teak logs ...	2	16	
Hoshangabad ...	Jawardha ...	Haldoo sleepers ...	39	39	
		Teak stumps ...	24	...	
		Hurra maunds ...	4	...	
		Fuel cart loads ...	253	...	
		Mohwa maunds ...	1	...	
	Magardha ...	Teak stumps ...	5,857	...	
		Hides ...	20	...	
	Burwani ...	Teak stumps ...	3,501	...	
		Teak Sakties ..	3,714	..	
		Khakers ...	882	...	
		Fuel, cart loads ...	11	...	
		Teak choolias ...	1,035	...	
		Grass, poolas ...	6,750	...	
	Dhekna ...	Teak stumps ..	60	...	
		Teak logs ...	37	185	
		Choolias ..	190	...	
		Sakties ...	481	...	
	2nd Class Reserves Forests ...	Poles ...	100	...	
		Teak poles ...	385	...	
		Wood pieces ...	146	...	
		Do. head loads ...	1,438	...	
		Do. cart load ..	417	...	
		Do. joti loads ..	4	...	
		Do. pony loads ...	13	...	
		Do. lots ...	244	...	
		Building wood, cart loads ...	3	...	
		Do. No. ...	26	...	
		Building wood, head loads ...	1	...	
		Bambus ...	357	..	
		Bambu fabricks, Do. ...	2	...	
		Gum Do. ...	1	...	
		Clay, cart loads ..	2	...	
		Brooms ...	72	...	
		Roots, cart loads ...	2	...	
		Teak wood pieces ...	124	...	
		Canoe, pony load ...	1	...	
		Cart wheels ...	2	...	
		Grass, cart load ...	1	...	
		Do., head load ...	12	...	
		Charcoal, Do. ...	14	...	
		Baber Do. ...	33	...	
		Logs ...	6	...	
		Mohwa, head loads ...	21	...	
		Yokes ...	5	...	
		Fuel, cart loads ...	10	...	
		Do. head loads ...	11	...	
		Do. poney loads ...	62	...	
		Do. pieces ...	2	...	
Nimar ...	Punassa ...	Teak patties ...	3	...	
		Fuel ...	...	800	
		Gram, maunds ...	5	...	
	Ratagarh ...	Deer horn ...	1	...	
	Khandwa Reserve ...	Fruits ...	17	...	
	Aouli ...	Chironji, maunds ...	1	...	
		Do. do ...	2	...	
		Hides ...	19	...	
		Lac do ...	2	...	
	Botida ...	Hides ...	7	...	
		Mohwa maunds ...	24	...	
	Kergaon ...	Grain do ...	12	...	
		Do. do ...	62	...	

FORM No. 61.—contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity	Cubic feet.	
		Vegetables, plants, &c. ...	120	...	
		Do. Head loads ...	20	...	
		Fruits ...	177	...	
		Kurbi, Poolas ...	625	...	
		Loki ...	1	...	
	Ajual ...	Confiscated wood Head loads ...	7	...	
Chanda ...	Allapilli ...	Tead planks ...	43	25	
	Tiddi ...	Teak sleepers ...	2,330	3,882	
		Saj sleepers ...	4,722	7,868	
	Nagpur ...	Ascoods ...	3	...	
	Moharli .	Lac, maunds ...	5	...	
		Hurra do. ...	373	...	
		Horns ...	538	...	
		Ascoods ...	186	...	
		Bamboos ...	378	...	
		Khakers ...	5,785	...	
		Honey, maunds ...	1	...	
		Tolies do ...	13	...	
		Teak poles ..	92	...	
	Chanda ...	Fruits ...	1,910	...	
	2nd Class Res. Forests	Mohwa maunds ...	1,678	...	
		Teak logs ...	911	10,781	
Seoni ...	Rukher ...	Teak poles ...	228	...	
		Tendu poles ...	2	...	
		Teak pieces, cart loads ...	5	...	
		Fuel Do. ..	9	...	
	Korai ...	Grass, Poolas ...	1,30,962	...	
		Bambus ...	57,503	...	
		Wheels, pair ..	2	...	
	2nd Class Res. Forests.	Confiscated wood, lots ...	8	..	
Saugor ...	Garhakota ...	Teak logs ...	23	...	
		Teak poles ...	508	...	
	Chitoli ...	Teak poles ...	50	...	
		Saj poles ...	883	...	
	2nd Class Res. Forests.	Common wood ...	12	...	
		Teak poles ...	6,527	...	
		Teal logs ..	5	...	
		Common wood, lot ...	1	...	
		Saj Poles ...	3	...	
		Different trees ...	94	...	
		Kahu piece ...	1	...	
		Teakwood lot ...	1	...	
		Khus, maund ...	1	...	
		Poles of different description ...	14	...	
		Charcoal, lot ..	1	...	
Wardha ...	Madna Bir ...	Grass, poolas ...	18,500	...	
	Dhuga ...	Teak poles ...	388	...	
		Bambus ...	25	...	
		Teak bits ...	4	...	
	Erjher ..	Teak poles ..	228	...	
	Mandaj ...	Skin ...	1	...	
	2nd Class Res. Forests.	Teak poles ...	702	...	
		Gum, maunds ...	1	...	
		Mohwa Do. ...	2	...	
		Fuel, cart loads ...	7	...	
		Do. Do. ...	39	...	
		Do. head loads ...	9	...	
		Do. bundles ...	56	...	
		Teak poles ...	91	...	
		Grass cart loads ...	2	...	

FORM No. 61.—contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity	Cubic feet.	
		Berkanas ...	25	...	
		Teak bits ...	15	...	
		Mayal ...	1	...	
		Wood pieces ...	4	...	
		Handles of Gati wood ...	3	...	
		Poles of inferior kind ...	100	...	
		Thorns, Karas load ...	1	...	
		Buckle, bundle ..	1	...	
		Total Local sales ...	6,61,883	27,624	
		Grand Total ...	9,08,203	60,037	
		Abstract of the circle sold from depots			
		Teak logs ...	22	308	
		Sal logs ...	1	42	
		Logs other than teak and sal ...	64	258	
		Sal sleepers ...	11	87	
		Sleepers other than teak and sal ...	11,14	3,867	
		Teak scantlings ..	1,330	1,205	
		Teak scantling ...	392	621	
		Teak furdays ..	60	253	
		Teak planks ...	872	435	
		Sal poles and pieces ...	60	...	
		Teak poles and pieces ...	2,583	...	
		Planks other than teak and sal ...	807	529	
		Junglewood props ...	7,676	24,808	
		Poles and pieces other than teak and sal ...	19,162	...	
		Boats ...	12	...	
		Total timber ...	43,166	32,413	
		Firwood, maunds ..	633	...	
		Do. cart loads ...	36	...	
		Do. bundles ...	20	...	
		Charcoal maunds ..	9	...	
		Bambus ...	30,783	...	
		Do. lot ..	1	...	
		Grass, Pullahs ...	1,80,458	...	
		Ropes made of fibre, bundles ..	5	...	
		Thorns, joti loads ..	11	...	
		Other minor produce ..	127	...	
		Do. maunds ..	71	...	
		Total ..	2,12,154	...	
		Total sales from depots ..	2,46,320	32,413	
		Sold locally.			
		Teak logs ..	979	10,989	
		Sal logs ..	26	421	
		Logs other than teak and sal ..	7	..	
		Teak sleepers ..	2,330	3,882	
		Sal sleepers ..	59	109	
		Sleepers other than teak and sal ..	4,761	7,907	

FORM No 61.—contd.

Division.	Depot or locality.	Produce sold.			Remarks.
		Description.	Number or quantity.	Cubic feet.	
		Sal scantlings ...	834	3,491	
		Sal furdahs ...	369	...	
		Teak planks ...	43	25	
		Sal poles and pieces ...	50	...	
		Teak poles and pieces ...	26,294	...	
		Do. lot ...	1	...	
		Do. cartloads ...	5	...	
		Poles & pieces other than teak and sal..	8,978	...	
		Do. lots...	253	...	
		Do. Cart loads...	420	...	
		Do. headloads ...	1,446	...	
		Do. joti loads ...	4	...	
		Do. pony loads ...	14	...	
		Boats ..	4	...	
		Total Timber ...	46,877	26,824	
		Firewood	2	800	
		Do. maunds ...	13,070	...	
		Do. cartloads ...	329	...	
		Do. pony loads ..	62	...	
		Do. bundles ...	56	...	
		Do. head loads ...	283	...	
		Charcoal, maunds ...	100	...	
		Do. head loads ...	14	...	
		Do. lot ...	1	...	
		Bambu's ...	2,27,399	...	
		Bambu manufactured, Head loads ..	2	...	
		Grass, pullahs ..	3,66,099	...	
		Do. Cart loads ...	3	...	
		Do. Head loads ...	12	...	
		Ropes made of fibre, bundle ...	1	...	
		Thorns, joti load ...	1	...	
		Other minor produce ...	72	...	
		Do. maunds ...	3,623	...	
		Do. cart loads ...	4	...	
		Do. head loads ..	55	...	
		Farm crops and produce of ...	...	...	
		Forest gardens ...	2,225	...	
		Do. maunds ...	80	...	
		Do. bundles ..	625	...	
		Do. head loads ...	20	...	
		Hides ..	64	...	
		Horns ...	804	...	
		Total ...	6,15,006	800	
		Total Local sales ..	6,61,883	27,624	
		Grand Total ..	9,08,203	60,037	

Annual Form No. 62.—(Prescribed.)

FOREST DEPARTMENT, CENTRAL PROVINCES.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depots or sold locally during the year 1883-84.

Particulars.	No. or quantity	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Logs other than teak and sal ...	27	95		
Scantlings ... Teak ...	6,031	6,952		
Scantlings ... Sal ...	292	468		
Sal sleepers ...	14	95		
Teak slabs or furdays ..	871	3,211		
Pieces marketable. Teak ...	1	...		
Pieces marketable. Sal ...	2	...		
Pieces marketable other than teak and sal ...	757	...		
Teak poles ...	294	...		
Poles other than teak and sal ...	5,603	...		
Teak planks ...	590	205		
Planks other than teak and sal ...	3,418	1,101		
Fuel, maunds ...	195	...		
Do. bundles ...	6	...		
Charcoal, maunds ...	9	...		
Boats ..	13	...		
Gum, maunds ..	1	...		
Bhibas Do. ...	2	...		
Kosa ...	127	...		
Bambus ...	16,082	...		
Grass pullas ...	1,37,069	...		
			1,71,404	12,127

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Removed by purchasers from depot. as per Form No. 61.				
Teak logs ...	22	308		
Sal logs ..	1	42		
Logs other than teak and sal ...	64	258		
Sal sleepers ...	11	87		
Sleepers other than teak and sal ...	1,114	3,867		
Teak scantlings ...	1,330	1,205		
Sal scantlings ...	392	621		
Teak furdas or slabs ...	60	253		
Teak planks ...	872	435		
Sal poles and pieces ...	60	...		
Teak poles and pieces ...	2,583	...		
Planks other than teak and sal ...	807	529		
Jungle wood props ...	7,676	24,808		
Poles and pieces other than teak and sal ...	19,162	...		
Boats ...	12	...		
Fire wood, maunds ...	633	...		
Do. cart loads ..	36	...		
Do. bundles ...	20	...		
Charcoal, maunds ...	9	...		
Bambus ...	30,783	...		
Do. lot ...	1	...		

Annual Form No. 62—(Continued.)

Particulars.	No. or quantity.	Cubic feet	Total of each head. No. or quantity.	Total of each head. Cubic feet.
RECEIVED FROM FORESTS IN DEPOT (AS PER FORM No. 60.)				
Teak logs ...	59	1,221		
Sal logs ...	2	59		
Logs other than teak and sal, ...	53	207		
Teak sleepers ...	2,293	3,820		
Sal sleepers ...	1,554	5,316		
Sleepers other than teak and sal ...	3,782	13,130		
Teak scantlings ..	1,434	1,117		
Sal scantlings ..	158	193		
Teak planks ...	5,222	2,381		
Planks other than teak and sal ..	152	139		
Teak poles and pieces ..	3,218	...		
Sal poles and pieces ...	60	...		
Poles and pieces other than teak and sal ...	26,482	...		
Do. bundles ..	8	...		
Jungle wood props ...	7,666	24,797		
Boats ...	1	...		
Fuel, maunds ...	724	...		
Do. cart loads ..	36	..		
Do. bundles ...	14	...		
Bamboos ...	33,235	...		
Do. lot ...	1	...		
Grass pullas ...	2,20,921	...		
Molain ropes bundles ...	5	...		
Thorns, Joti loads ..	25	...		
Other minor produce maunds.	65	...		
			3,07,173	52,380
RECEIVED FROM THE FORESTS AND SOLD LOCALLY				
Teak logs ...	979	10,989		
sal logs ..	26	421		
Logs other than teak and sal ...	7	...		
Teak sleepers ...	2,330	3,882		
Sal sleepers ...	59	109		
Sleepers other than teak and sal ..	4,761	7,907		

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
Grass poolas ...	1,80,458	...		
Ropes made of fibre, bundles ...	5	...		
Thorns joti loads ...	11	...		
Other minor produce ..	127	...		
Do. maunds ...	71	...		
			2,46,320	32,413
SOLD LOCALLY (as per Form No. 61.)				
Teak logs ...	979	10,989		
Sal logs ..	26	421		
Logs other than teak and sal ...	7	...		
Teak sleepers ...	2,330	3.882		
Sal sleepers ..	59	109		
Sleepers other than Teak and sal ...	4,761	7,907		
Sal scantlings ..	834	3,491		
Sal furdas ...	369	...		
Teak planks ...	43	25		
Sal poles and pieces ..	50	...		
Teak poles and pieces ..	26,294	...		
Do. lot ...	1	...		
Do. cart loads ...	5	...		
Poles and pieces other than teak and sal ..	8,978	...		
Do. lots ...	253	..		
Do. cart loads ...	420	...		
Do. head loads ..	1,446	...		
Do. joti loads ...	4	...		
Do. poney loads ...	14	...		
Boats ...	4	...		
Firewood ..	2	800		
Do. maunds ...	13,070	...		
Do. cart loads ...	329	..		
Do. poney loads ..	62	...		
Firewood bundles ...	56	...		
Do. head loads ...	283	...		

Sal scantlings ...	834	3,491		
Sal furdas ..	369	...		
Teak planks ..	43	25		
Sal poles and pieces ..	50	..		
Teak poles and pieces ..	26,294	...		
Do. lot ..	1			
Do. cart loads ..	5	...		
Poles and pieces other than teak and sal ..	8,978	...		
Poles and pieces other than teak and sal lots ...	253	...		
Do. cart loads ..	420	...		
Do. head loads ..	1,446	...		
Do. joti loads ..	4	...		
Do poney loads ..	14	..		
Boats ...	4	...		
Firewood ...	2	800		
Do. maunds ..	13,070	...		
Do. cart loads ...	329	..		
Do pony loads ...	62	...		
Do. bundles ..	56	...		
Do. headloads ..	283	...		
Charcoal, maunds ..	100	..		
Do. head loads ..	14	...		
Do. lots ...	1	...		
Bambus ..	2,27,399	...		
Bambu manufactures head loads ..	2	...		
Grass, poolas ...	3,66,099	...		
Do cart loads ..	3	...		
Do. head loads ...	12	...		
Ropes of fibres, bundles ...	1	...		
Thorns, joti loads ...	1	...		
Other minor produce ..	72	...		
Do. maunds...	3,623	...		
Do. cart loads ..	4	...		
Do. head loads...	55	...		
Farm crops and produce of forest gardens ...	2,225	...		
Do. maunds ..	80	...		
Do. bundles..	625	...		
Do headloads .	20	...		
Hides ...	64	...		
Horns ...	804	...		
			6,61,858	27,624

Charcoal maunds ...	100	...		
Do. head loads ...	14	...		
Do. lot ...	1	...		
Bambus ...	2,27,399	...		
Bambu manufactures head loads ...	2	...		
Grass poolas ...	3,66,099	...		
Do cart loads ...	3	...		
Grass poolas head loads ...	12	...		
Ropes made of fibre bundles ..	1	...		
Thorns, joti loads ...	1	...		
Other minor produce ...	72	...		
Do maunds ...	3,623	...		
Do. cart loads ...	4	..		
Do. head loads ...	55	...		
Farm crops and produce of forest gardens ...	2,225	...		
Do. maunds ..	80	...		
Do. bundles ..	625	...		
Do. head loads ..	20	...		
Hides ..	64	..		
Horns ...	804	...		
			6,61,883	27,624
Decrease by Remeasurrnt.				
Sal sleepers ...	...	2		
Fuel maunds ...	78	...		
			78	2
Used Departmentally.				
Sal scantlings ..	8	6	...	...
Teak poles ...	90	...	...	...
Piees other than teak and sal ..	16	...	...	...
Thorns, karas loads ..	3	..	...	...
Bambus ...	417	..	...	...
Grass pullas ...	22,105	...	..	...
			22,639	6
Conversion.				
Teak furdays or slabs ..	3	13		
			3	13
Wastage.				
Grass pullas ...	6,815	...	...	...
			6,815	...

Annual Form No. 62—(Continued.)

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
EXCESS BY REMEASUREMENT.				
Props of wood other than teak and sal ...	...	1		
Pieces other than teak and sal ...	1	...		
			1	1
EXCESS ISSUE OF 1882-83 NOW TAKEN BACK ON STOCK				
Bambus ...	50	...		
			50	...
Total ...	...	...	1,141,516	92,132

Particulars.	No. or quantity.	Cubic feet.	Total of each head. No. or quantity.	Total of each head. Cubic feet.
BALANCE AT CLOSE OF THE YEAR (as per from No 65)				
Teak logs ...	37	913		
Sal logs ...	1	17		
Logs other than teak and sal ...	6	34		
Teak sleepers ...	2,293	3,820		
Sal sleepers ...	1,557	5,322		
Sleepers other than Teak and sal ...	2,668	9,263		
Teak scantlings ...	6,135	6,864		
Sal scantlings ...	50	34		
Teak slabs or furdays ...	808	2,945		
Teak panks ...	4,940	2,151		
Planks other than teak and sal ...	2,763	711		
Teak poles and pieces ...	982	...		
Sal pieces ...	2	...		
Poles and pieces other than teak and sal ...	13,530	...		
Bambus ...	18,167	...		
Boats ...	2	...		
Firewood maunds ...	208	...		
Do. head loads ...	5	...		
Thorns, karas loads ...	12	...		
Grass, pulas ...	1,48,612	...		
			2,02,778	32,074
Total ...	...	...	1,140,516	92,132

FORM No. 63.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Timber and other produce cut, collected and removed from the Forest by consumers or purchasers including pasture during the year 1883-84.

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p.	
Direction ...	Teak wood ...	3	2 8 0	2 8 0	
	Total ...	3	2 8 0	2 8 0	
	Bamboos ...	5,687	35 8 9	35 8 9	
	Total ...	5,687	35 8 9	35 8 9	
	Grass, cart loads ...	36	13 4 0	13 4 0	
	Do. kawar do. ..	39	1 9 6	1 9 6	
	Total ...	75	14 13 6	14 13 6	
	Hide ...	1	0 4 0	0 4 0	
	Total ...	1	0 4 0	0 4 0	
Mandla ..	Wood other than teak and sal ...	230	48 14 9	48 14 9	
	Total ...	230	48 14 9	48 14 9	
	Firewood, cart loads ...	197	57 0 0	57 0 0	
	Do. head do. ...	809	19 1 9	19 1 9	
	Do. karas do. ...	975	46 4 6	46 4 6	
	Do. maunds ...	1,380	43 5 9	43 5 9	
	Do. bundles ...	295	8 4 6	8 4 6	
	Total ...	2,656	174 0 6	174 0 6	
	Bamboos ...	57,688	544 10 9	544 10 9	
	Do. twigs, maunds ...	32	2 0 0	2 0 0	
	Do. head loads ...	172	4 0 6	4 0 6	
	Total ...	57,892	550 11 3	550 11 3	
	Grazing buffaloes ...	769	184 3 9	184 3 9	
	Do. cows and bullocks ...	9,094	1,181 7 6	1,181 7 6	
	Do. pony ...	1	0 2 0	0 2 0	
	Grass, karas loads ...	48	0 12 0	0 12 0	
	Do. head do. ...	381	5 15 3	5 15 3	
	Do. bundles ...	11,93,687	268 5 9	268 5 9	
	Do. beed ...	...	100 0 0	100 0 0	
	Do. of timber yard contract ...	...	7 0 0	7 0 0	
	Do. on boundary line ...	...	31 8 0	31 8 0	
	Total ...	12,03,980	1,779 6 3	1,779 6 3	
	Hides ...	36	57 8 0	57 8 0	
	Other minor produce head, loads ...	348	40 3 6	40 3 6	
	Do. karas do. ...	287	25 5 6	25 5 6	
	Do. contract ...	...	571 3 0	571 3 0	
	Do. maunds ...	22	6 8 0	6 8 0	
	Do. cubic feet ...	49	7 0 0	7 0 0	
	Total ...	742	707 12 0	707 12 0	

FORM No. 63—Contd.

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue. Rs.	a.	p	Amount actually realized during the year. Rs.	a.	p.	Remarks.
Betul ...	Teak wood, pieces ...	847	217	6	0	217	6	0	
	Do. cart loads ...	63	353	0	0	353	0	0	
	Do. karas do. ..	2,275	4,394	4	0	4,394	4	0	
	Do. jawars do. ...	1,153	514	10	0	514	10	0	
	Do. head do. ..	48	6	0	0	6	0	0	
	Wood other than teak and sal, cart loads ...	37	145	0	0	145	0	0	
	Do. karas do. ...	417	417	9	0	417	9	0	
	Do. head do. ...	10	3	4	0	3	4	0	
	Do. pieces ...	85	136	8	0	136	8	0	
	Building wood cart loads ...	1,717	3,127	1	6	3,127	1	6	
	Do. karas loads ...	239	242	2	0	242	2	0	
	Do. bullock do. ..	10	4	0	0	4	0	0	
	Do. jawaras do. ...	25	3	2	0	3	2	0	
	Do. head do. ...	16,549	1,558	7	9	1,558	7	9	
	Do. pieces ...	314	80	4	0	80	4	0	
	Total ...	22,789	11,202	10	3	11,202	10	3	
	Fuel licenses ...	3,515	4,031	8	0	4,031	8	0	
	Do. cart loads ...	2,978	526	14	0	526	14	0	
	Do. karas do. ...	928	96	11	5	96	11	5	
	Do. bullock do. ...	272	21	3	10	21	3	10	
	Do. ass do. ...	16	1	0	0	1	0	0	
	Do. head do. ...	45,463	715	14	6	715	14	6	
	Charcoal cart do. ...	9	15	11	0	15	11	0	
	Do. bullock do. ...	33	12	6	0	12	6	0	
	Do. head do. ...	1,168	103	11	0	103	11	0	
	Total ...	54,382	5,524	15	9	5,524	15	9	
	Bambus ...	582,735	6,617	6	3	6,617	6	3	
	Total ...	582,735	6,617	6	3	6,617	6	3	
	Grazing buffaloes ...	18,416	4,519	4	0	4,519	4	0	
	Do. cows and bullocks ...	225,173	15,878	12	0	15,878	12	0	
	Do. goats ...	57,476	659	11	10	659	11	10	
	Grass cart loads ...	3,731	730	10	0	730	10	0	
	Do. bullocks do. ...	4,140	375	4	0	375	4	0	
	Do. head do. ...	37,118	946	0	6	946	0	6	
	Do. ass do. ..	245	23	0	0	23	0	0	
	Total ...	318,299	23,132	10	4	23,132	10	4	
	Skin number ...	21	25	4	0	25	4	0	
	Do. head loads ...	636	70	0	0	70	0	0	
	Do. cart do. ...	181	272	0	0	272	0	0	
	Do. bull do. ...	170	170	0	0	83	8	0	
	Do. ass do. ...	7	3	0	0	3	0	0	
	Horns cart do. ...	2	6	0	0	6	0	0	
	Do. bull do. ...	26	15	0	0	15	0	0	
	Do. head do. ...	68	6	0	0	6	0	0	
	Do. Number ...	11	0	5	0	0	5	0	
	Other minor produce contract ...	..	6,659	13	0	6,390	2	6	
	Do. maunds ...	14	124	2	7	124	2	7	
	Do. cart loads ...	534	489	0	0	489	0	0	
	Do. bull do. ...	816	540	4	0	540	4	0	
	Do. ass do. ...	285	31	0	0	31	0	0	
	Do. head do. ...	2,606	214	2	6	214	2	6	
	Total ...	5,127	8,625	15	1	8,269	12	7	

FORM No. 63.—Contd.

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue. Rs.	a.	p.	Amount actually realized during the year. Rs.	a.	p.	Remarks.
Hoshangabad ...	Commutation families	...	3,393	4,372	8	0	4,372	8	0	
	Total	..	3,393	4,372	8	0	4,372	8	0	
	Teak trees	...	127	26	0	0	26	0	0	
	Do. wood pieces	...	6,957	3,337	8	0	3,337	8	0	
	Do. do. cart loads	...	101	342	0	0	342	0	0	
	Tree other than teak and sal	...	1	1	0	0	1	0	0	
	Wood do. pieces	..	5,909	1,553	13	6	1,553	13	6	
	Do. cart loads	...	105	408	8	0	408	8	0	
	Head do.	...	155	12	1	3	12	1	3	
	Building wood 2 bullock cart loads	...	7,017	10,939	12	0	10,939	12	0	
	Do. 4 bullock cart loads	...	92	296	4	0	296	4	0	
	Do. head do.	...	23,860	1,864	3	4	1,864	3	4	
	Total	...	44,324	18,781	2	1	18,781	2	1	
	Firewood cart loads	..	34,696	4,849	8	0	4,849	8	0	
	Do. head do.	..	38,350	346	13	8	346	13	8	
	Do. donkey do.	..	932	22	7	9	22	7	9	
	Charcoal head do.	...	4,125	257	13	0	257	13	0	
	Do. cart do.	...	98	145	14	0	145	14	0	
	Total	...	78,201	5,622	8	5	5,622	8	5	
	Bamboos fabrics cart loads	...	80	119	0	0	119	0	0	
	Do. number	...	14,96,356	14,868	1	11	14,868	1	11	
	Do. head loads	...	9,746	601	6	0	601	6	0	
	Total	...	15,06,182	15,588	7	11	15,588	7	11	
	Grazing buffaloes	...	45,460	5,058	2	3	5,058	2	3	
	Do. cows and bulls	...	9,62,504	19,110	11	0	19,110	11	0	
	Do. sheep	...	56,113	381	2	1	381	2	1	
	Do. donkeys	...	144	8	8	9	8	8	9	
	Do. camels	...	161	38	13	0	38	13	0	
	Do. ponies	...	542	10	5	3	10	5	3	
	Grass, cart loads	...	5,065	1,250	9	0	1,250	9	0	
	Do. head loads	...	11,811	161	10	11	161	10	11	
	Do. pulas	...	3,000	1	8	0	1	8	0	
	Bir by auction	...	...	1,025	0	0	1,025	0	0	
	Total	...	3,84,600	27,046	6	3	27,046	6	3	
	Hides, head loads	...	18	1	3	0	1	3	0	
	Do. auction	...	...	8	2	0	8	2	0	
	Do. contract	...	...	830	5	0	830	5	0	
	Do. number	...	601	60	4	0	60	4	0	
	Horns, cart loads	...	1	1	0	0	1	0	0	
	Do. number	..	563	12	7	3	12	7	3	
	Do. maunds	...	1	2	1	0	2	1	0	
	Do. contract	...	...	6	0	0	6	0	0	
	Do. pony loads	...	13	3	4	0	3	4	0	
	Do. pattes	...	5	10	0	0	10	0	0	
	Other minor produce, maunds	...	3,795	1,054	7	0	1,054	7	0	

FORM No. 63.—Contd.

Division.	Produce removed.		Amount of revenue.	Amount actually realized during the year.	Remarks.
	Description.	No. or quantity.			
			Rs. a. p.	Rs. a. p.	
Hoshangabad ...	Other minor produce contract ...	...	1,160 3 0	1,160 3 0	
	Do. head loads ..	28,044	1,654 14 10	1,654 14 10	
	Do. 4 bullock cart loads.	77	50 8 0	50 8 0	
	Do. 2 bullock do. ...	4,996	1,564 2 0	1,564 2 0	
	Do. buffalo cart ...	10	10 10 9	10 10 9	
	Do. pony cart ...	93	31 7 0	31 7 0	
	Do. bull cart ...	920	37 6 9	37 6 9	
	Do. donkey cart ...	9	2 15 0	2 15 0	
	Total ...	38,752	6,501 4 7	6,501 4 7	
Nimar ..	Commutation ...	...	5,626 10 3	5,626 10 3	
	Total ..	...	5,626 10 3	5,626 10 3	
	Teak wood, number ..	1,994	744 7 1	744 7 1	
	Do. cart loads ...	585	3,451 0 0	3,451 0 0	
	Do. joti loads ..	757	1,013 12 0	1,013 12 0	
	Tree other than teak and sal ..	1	6 8 0	6 8 0	
	Wood other than teak and sal ...	1,486	372 3 6	372 3 6	
	Do. cart loads ..	986	1,412 14 0	1,412 14 0	
	Do. 4 bullock do. ...	4	9 0 0	9 0 0	
	Do. joti do. ...	2	1 8 0	1 8 0	
	Do. head do. ...	771	92 1 6	92 1 6	
	Building wood, cart do. ...	1	1 4 0	1 4 0	
	2nd Class Forests ...	...	6,419 14 3	6,419 14 3	
	Total ...	6,587	13,524 8 4	13,524 8 4	
	Firewood, cart load ...	3,085	781 0 0	781 0 0	
	Do. bull do, ...	82	7 11 0	7 11 0	
	Do. head do, ..	91	20 2 6	20 2 6	
	Do. donga do, ...	1	1 8 0	1 8 0	
	2nd Class Forests ...	...	1,988 10 0	1,988 10 0	
	Total ...	3,259	2,798 15 6	2,798 15 6	
	Bamboos, number ...	5,13,424	5,185 7 11	5,185 7 11	
	Do. head loads ...	388	87 11 0	87 11 0	
	2nd Class Forests ...	...	1,564 12 3	1,564 12 3	
	Total ...	5,13,812	6,837 15 2	6,837 15 2	
	Grazing buffaloes ...	11,979	3,090 2 0	3,090 2 0	
	Do. cows and bulls ...	34,342	4,332 3 0	4,332 3 0	
	Do. goats and sheep ...	2,391	85 4 0	85 4 0	
	Do. ponies ...	19	2 12 0	2 12 0	
	Do. camels ...	42	10 8 0	10 8 0	
	Grass 2 bullock cart loads ...	4,256	642 8 0	642 8 0	
	Do. 4 do. do. ...	141	27 11 0	27 11 0	
	Do. bull do. ...	679	42 14 0	42 14 0	
	Do. donkey do, ...	23	34 8 0	34 8 0	
	Do. head do. ...	2,965	96 10 0	96 10 0	
	Do. bundles ...	51,925	84 13 3	84 13 3	
	2nd Class Forests ...	...	20,435 6 0	20,435 6 0	
	Total ...	1,09,062	28,885 1 3	28,885 1 3	

FORM No 63.—Contd.

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue. Rs. a. p.	Amount actually realized during the year. Rs a. p.	Remarks.
	Hides, contract	...	...	24 0 0	24 0 0	
	Do. number	..	33	43 12 0	43 12 0	
	Horns	..	5	1 1 0	1 1 0	
	Do. bull loads	..	1	1 0 0	1 0 0	
	Farm crop, maunds	..	26	42 5 4	42 5 4	
	Other minor produce, maunds	..	36	148 10 0	148 10 0	
	Do. head loads	..	1,160	423 10 6	423 10 6	
	Do. cart do.	...	232	75 4 0	75 4 0	
	Do. number	...	1,547	48 2 0	48 2 0	
	Do. c. ft.	...	2,459	33 5 6	33 5 6	
	Do. bull loads	...	309	77 8 0	77 8 0	
	2nd class forests	..	..	1,397 0 9	1,397 0 9	
	Total	..	5,808	2,315 10 1	2,315 10 1	
Chanda ...	Commutation	...	...	13,178 5 9	13,178 5 9	
	Total	...	...	13178 5 9	13,178 5 9	
	Wood other than teak and sal	...	85,552	4,465 5 6	4,465 5 6	
	Do. cart loads	...	2,912	4,096 6 1	4,096 6 1	
	Do. head do.	...	6,483	405 3 9	405 3 9	
	Total	...	94,947	9,566 15 4	9,566 15 4	
	Fuel, cart loads	...	1,11,267	13,423 1 4	13,423 1 4	
	Charcoal, head do.	...	2,288	144 15 6	144 15 6	
	Do. cart do.	...	2,101	262 10 0	262 10 0	
	Total	..	1,15,656	13,830 10 10	13,830 10 10	
	Bamboos, cart loads	...	1,415	3,159 8 0	3,159 8 0	
	Do. head do.	...	22,280	1,392 8 0	1,392 8 0	
	Do. compensation	...	131	131 8 2	131 8 2	
	Do. number	..	9,01,680	9,815 1 7	9,815 1 7	
	Do. materials	...	7,79,393	2,287 13 5	2,287 13 5	
	Total	..	17,04,809	16,786 7 2	16,786 7 2	
	Grazing buffaloes	...	50,252	51,487 9 2	51,487 9 2	
	Do. cows and bulls	...	3,58,693			
	Do. sheep and goats	...	1,86,848			
	Grass, cart loads	...	7,907	2,016 5 0	2,016 5 0	
	Do. head do.	...	755	17 5 9	17 5 9	
	Total	...	6,03,558	53,521 3 11	53,521 3 11	
	Other minor produce	...	...	2,344 12 0	2,344 12 0	
	Do. cart loads	...	66	20 6 0	20 6 0	
	Do. number	...	...	2,223 13 2	2,223 13 2	
	Horns, maunds	...	5	13 0 0	13 0 0	
	Skin	...	73	16 4 0	16 4 0	
	Hides	..	89	166 12 0	166 12 0	
	Total	...	233	4,784 15 2	4,784 15 2	
Seoni ...	Commutation	...	20,560	9,526 11 0	9,526 11 0	
	Total	...	20,560	9,526 11 0	9,526 11 0	

FORM No. 63.—Contd.

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue. Rs.	a.	p.	Amount actually realized during the year. Rs	a..	p.	Remarks.
	Wood other than teak and sal	...	57,994	4,664	10	3	4,664	10	3	
	Do. cart loads	...	2,870	2,891	0	0	2,891	0	0	
	Do. head do.	...	19,770	673	3	6	673	3	6	
	Total	...	80,634	8,228	13	9	8,228	13	9	
	Fuel, cart loads	...	22,633	2,943	3	9	2,943	3	9	
	Do. head do.	...	65,865	503	12	4	503	12	4	
	Charcoal, cart do.	...	351	351	0	0	351	0	0	
	Do. head do.	...	8,055	503	7	0	503	7	0	
	Miscellaneous	...	...	197	11	0	197	11	0	
	Total	...	96,904	4,499	2	1	4,499	2	1	
	Bamboos	...	11,98,750	11,056	14	7	11,056	14	7	
	Do. cart loads	..	2,017	701	14	0	701	14	0	
	Do. head do.	...	10,979	730	8	9	730	8	9	
	Total	...	12,11,746	12,489	5	4	12,489	5	4	
	Grass, cart loads	...	7,827	1,012	8	0	1,012	8	0	
	Do. head do.	...	1,475	23	1	0	23	1	0	
	Do. pullas	...	3,04,225	312	7	6	312	7	6	
	Grazing passing cattle	...	16,085	132	14	8	132	14	8	
	Do. bullocks	..	2,02,059	26,966	11	3	26,966	11	3	
	Do. buffaloes	...	26,472	5,211	9	0	5,211	9	0	
	Do. goats	...	12,251	398	6	0	398	6	0	
	Do. ponies	...	14	2	10	0	2	10	0	
	Total	...	4,70,408	34,060	3	5	34,060	3	5	
	Horns	...	74	2	6	9	2	6	9	
	Do. head loads	...	4	0	8	0	0	8	0	
	Do. banghy do.	...	1	0	4	0	0	4	0	
	Skins	..	3	6	0	0	6	0	0	
	Do. contract	...	...	86	0	0	86	0	0	
	Do. auction	...	...	38	0	0	38	0	0	
	Other minor produce, cart loads	...	52	26	9	0	26	9	0	
	Do. yoke do.	...	83	9	0	9	9	0	9	
	Do. banghy do.	...	388	43	4	0	43	4	0	
	Do. head do.	...	1,150	51	7	0	51	7	0	
	Do. maunds	...	599	82	7	0	82	7	0	
	Do. number	...	799	49	7	6	49	7	6	
	Do. contract	...	...	319	0	3	319	0	3	
	Do. auction	...	...	553	2	0	553	2	0	
	Without quantity	...	...	2,889	1	4	2,889	1	4	
	Total	...	3,153	4,156	9	7	4,156	9	7	
Saugor ...	Commutation	...	...	867	9	0	867	9	0	
	Total	...	...	867	9	0	867	9	0	
	Teak trees	...	3,319	571	9	3	571	9	3	
	Trees other than teak and sal	...	82	83	8	3	83	8	3	
	Wood do. do. do.	...	3,482	1,004	4	8	1,004	4	8	
	Building wood, cart loads	..	2,072	2,146	12	0	2,146	12	0	
	Do. joti do.	...	22	63	10	0	63	10	0	
	Do. buffalo do.	...	897	280	5	0	280	5	0	
	Do. head do.	...	28,172	1,844	12	0	1,844	12	0	
	Total	...	38,046	5,994	13	2	5,994	13	2	

FORM No. 63.—Contd.

Divisions.	Produce. Description.		No. or quantity.	Amount of revenue. Rs.	a.	p.	Amount actually realized during the year. Rs.	a.	p.	Remarks.
	Firewood cart loads	...	32,274	4,876	4	6	4,876	4	6	
	Do. buffalo do.	...	7,463	462	6	3	462	6	3	
	Do. pony or donkey loads	...	784	60	10	9	60	10	9	
	Do. head loads	..	52,764	942	8	3	942	8	3	
	Do. basket do.	..	931	21	0	5	21	0	5	
	Do. oxen do.	...	76	9	2	2	9	2	2	
	Do. yoke loads	...	16	29	7	6	29	7	6	
	Do. lots	...	4	36	14	6	36	14	6	
	Charcoal lots	...	3	5	8	0	5	8	0	
	Do. cart loads	..	15	15	0	0	15	0	0	
	Do. buffalo do.	...	600	187	8	1	187	8	1	
	Do. head do.	...	5,593	375	12	0	375	12	0	
	Do. basket do,	...	21	3	9	2	3	9	2	
	Total	...	1,00,544	7,025	11	7	7,025	11	7	
	Bambus number	...	2,59,207	2,866	5	9	2,866	5	9	
	Do. yoke loads	..	2	6	0	0	6	0	0	
	Do. head do.	...	10	11	4	0	11	4	0	
	Total	...	2,59,219	2,883	9	9	2,883	9	9	
	Grass pullas	...	12,600	18	7	4	18	7	4	
	Do. cart loads	...	342	116	2	4	116	2	4	
	Do. buffalo do.	...	36	12	0	3	12	0	3	
	Do. pony do.	..	2,355	149	10	8	149	10	8	
	Do. head do.	...	4,989½	81	9	4	81	9	4	
	Do. oxen do.	..	22	9	10	0	9	10	0	
	Do. beers	...	...	2,434	4	3	2,434	4	3	
	Grazing buffalos	...	43,987	8,553	10	8	8,553	10	8	
	Do. camel	..	14	11	8	0	11	8	0	
	Do. oxen	...	2,01,280	26,377	13	3	26,377	13	3	
	Do: sheep and goats	...	15,672	527	4	6	527	4	6	
	Do. ponies.	...	774	58	13	9	58	13	9	
	Total	..	2,82,071½	38,350	14	4	38,350	14	4	
	Horns	...	4	3	2	0	3	2	0	
	Hides	...	12	22	2	7	22	2	7	
	Other Minor Produce cart loads	...	2,873	783	13	6	783	13	6	
	Do. buffalo loads	...	4,703	265	11	9	265	11	9	
	Do. head loads	...	18,954	651	7	8	651	7	8	
	Pony or donkey loads	...	413	5	12	2	5	12	2	
	Do. maunds	..	27	3	11	1	3	11	1	
	Do. lease	...	...	16,161	12	2	16,161	12	2	
	Total	...	26,986	17,897	8	11	17,897	8	11	
Wardha ...	Timber cart loads	...	949	1,548	0	11	1,548	0	11	
	Do. head loads	...	52	12	9	7	12	9	7	
	Total	...	1,001	1,560	10	6	1,560	10	6	
	Firewood heads loads	...	5,230	159	5	6	159	5	6	
	Do. banghy loads	...	1,551	187	13	0	187	13	0	
	Do. cart loads	...	2,555	675	15	10	675	15	10	
	Charcoal head loads	..	2	0	11	8	0	11	8	
	Cowdung	...	...	1,021	14	6	1,021	14	6	
	Total	...	9,338	2,045	12	6	2,045	12	6	

FORM No. 63.—Contd.

Division.	Produce removed. Description.		No. or quantity.	Amount of revenue. Rs.	a.	p.	Amount actually realized during the year. Rs.	a.	p	Remarks.
	Bamboos head loads	...	4	10	13	0	10	13	0	
	Total	...	4	10	13	0	10	13	0	
	Grass preserves	..	...	1,862	0	0	1,862	0	0	
	Do. head loads	...	1,231	37	14	5	37	9	3	
	Do. cart loads	...	2,840	745	11	9	745	11	9	
	Grazing cows	...	65,170	10,950	3	9	10,950	3	9	
	Do. buffaloes	...	12,915	4,234	12	9	4,234	12	9	
	Total	...	82,156	17,830	10	8	17,830	5	6	
	Thorns head loads	...	10	1	3	5	1	3	5	
	Do. and bukle cart loads	...	521	79	4	4	79	4	4	
	Other Minor Produce by contract	...	...	722	0	0	722	0	0	
	Total	...	531	802	7	9	802	7	9	
Chhindwara ...	Teak wood cart loads	...	5,170	756	8	6	756	8	6	
	Wood other than teak and sal	...	1	3	0	0	3	0	0	
	Do. banghy loads	...	16	0	2	8	0	2	8	
	Do. bullock do.	...	5	0	2	6	0	2	6	
	Do. cart do.	...	4,951	1,692	5	6	1,692	5	6	
	Do. yoke do.	...	4,584	1,670	10	2	1,670	10	2	
	Do. head do.	..	10,534	683	8	0	683	8	0	
	Do. lease	...	...	333	1	4	333	1	4	
	Total	...	25,261	5,139	6	8	5,139	6	8	
	Commutation	...	924	937	0	0	937	0	0	
	Firewood cart loads	...	6,854	878	0	3	878	0	3	
	Do. yoek do.	...	4,195	200	0	3	200	0	3	
	Do. bullock do.	..	2,049	64	0	6	64	0	6	
	Do. donkey do.	...	846	14	7	6	14	7	6	
	Do. banghy do.	...	444	4	10	2	4	10	2	
	Do. head do.	...	27,803	203	11	8	203	11	8	
	Damage recovered	...	...	3	0	0	3	0	0	
	Charcoal cart loads	...	21	36	12	0	36	12	0	
	Buffalo do.	...	8	6	0	0	6	0	0	
	Charcoal bullock loads	...	189	94	8	0	94	8	0	
	Head do.	...	2,371	199	9	9	199	9	9	
	Total	...	45,704	2,641	12	1	2,641	12	1	
	Bambus number	...	1,66,201	3,034	9	5	3,034	9	5	
	Do. head loads	..	67	15	14	6	15	14	6	
	Total	...	1,66,268	3,050	7	11	3,050	7	11	
	Grazing cattle	...	1,18,385	11,322	3	6	11,322	3	6	
	Do. buffaloes	...	13,530	2,585	10	0	2,585	10	0	
	Do. sheep	...	10,392	502	5	9	502	5	9	
	Travellers buffaloes	...	313	9	12	6	9	12	6	
	Do. sheep	...	18,417	95	14	9	95	14	9	
	Do. cattle	...	2,146	33	8	6	33	8	6	
	Grass cart loads	...	14,999	1,071	2	9	1,071	2	9	
	Do. bullock do.	...	657	20	13	0	20	13	0	
	Do. banghy do.	...	6	0	1	0	0	1	0	
	Do. yoke do.	...	14	0	10	6	0	10	6	
	Do. leased out	..	...	6	0	0	6	0	0	
	Do. head loads	...	26,768	143	8	6	143	8	6	
	Total	...	1,78,947	15,791	10	9	15,791	10	9	

FORM No. 63.—Contd.

Division.	Produce removed. Description.	No. or quantity.	Amount of revenue. Rs. a. p.	Amount actually realized during the year. Rs. a. p.	Remarks.
	Skins ...	6	9 0 0	9 0 0	
	Other Minor Produce cart loads ...	1,002	126 0 4	126 0 4	
	Do. yoke loads ...	196	9 3 0	9 3 0	
	Do. head do. ...	19,231	124 6 9	124 6 9	
	Do. banghy do. ...	141	2 14 0	2 14 0	
	Do. bull do. ...	15	0 10 0	0 10 0	
	Do. donkey do. ...	14	0 3 6	0 3 6	
	Do. buffalo do. ...	2	0 2 5	0 2 5	
	Do. number ..	3	1 7 11	1 7 11	
	Do. lease ...	...	2,090 0 10	2,090 0 10	
	Total ...	20,510	2,364 3 9	2,364 3 9	
Damoh ...	Commutation ...	...	3,937 0 0	3,937 0 0	
	Total ...	...	3,937 0 0	3,937 0 0	
	Timber other than teak and sal ...	57,296	2,421 14 0	2,421 14 0	
	Do. cart loads ...	33	42 0 0	42 0 0	
	Do. yoke do. ...	738	292 12 0	292 12 0	
	Do. head do. ...	14	5 4 0	5 4 0	
	Timber other than teak and sal, bull load ...	15,224	2,178 14 0	2,178 14 0	
	Do. auction ...	25,647	2,384 2 10	2,384 2 10	
	Do. pieces ...	550	396 10 0	396 10 0	
	Do. kandas ...	20	25 1 0	25 1 0	
	Do. buffalo loads ...	17	20 0 0	20 0 0	
	Total ...	99,539	7,766 9 10	7,766 9 10	
	Firewood head loads ...	112,620	1,930 9 10	1,930 9 10	
	Do. yoke do. ...	2,661	352 0 0	352 0 0	
	Do. bull do. ...	27,500	690 10 8	690 10 8	
	Do. cart do. ...	3,137	864 0 6	864 0 6	
	Do. auction ...	2	0 7 6	0 7 6	
	Charcoal head loads ...	11,618	701 0 0	701 0 0	
	Do. cart do. ..	13	6 8 0	6 8 0	
	Do. head do. ...	5	1 10 3	1 10 3	
	Do. kilee do. ...	10	20 0 0	20 0 0	
	Total ...	159,568	4,566 14 9	4,566 14 9	
	Bamboos head loads ...	15,540	945 10 0	945 10 0	
	Do. bull do. ...	1,803	336 10 0	336 10 0	
	Do. auction ...	513	9 0 3	9 0 3	
	Do. number ...	6,300	32 8 0	32 8 0	
	Do. auction ...	10,142	44 5 6	44 5 6	
	Total ...	34,298	1,368 1 9	1,368 1 9	
	Grazing buffaloes ...	36,984	7,039 14 0	7,039 14 0	
	Do. cows and bulls ...	1,71,415	21,908 11 0	21,908 11 0	
	Do. sheep and goats ...	18,144	1,141 2 0	1,141 2 0	
	Do. elephants ...	1	6 0 0	6 0 0	
	Do. oxen ...	2,735	346 15 0	346 15 0	
	Grass pullas ...	1,41,000	159 4 0	159 4 0	
	Do. head loads ...	5	0 8 9	0 8 9	
	Do. contract ...	...	76 4 0	76 4 0	
	Total ...	3,70,284	30,678 10 9	30,678 10 9	

FORM No. 63.—Contd.

Division.	Produce removed. Description,	No. or quantity,	Amount of revenue.	Amount actually realized during the year.	Remarks.
			Rs. a. p.	Rs. a. p.	
	Hides, auction ...	329	263 7 4	263 7 4	
	Horns do. ...	9	2 1 6	2 1 6	
	Other Minor Produce ...	24	312 0 0	312 0 0	
	Do. auction ...	29	12,405 10 6	12,405 10 6	
	Do. contract ..	28	28 8 0	28 8 0	
	Do. cart load ..	6,152	222 10 0	222 10 0	
	Do. head do. ..	1	0 2 6	0 2 6	
	Total ...	6,544	13,234 7 10	13,234 7 10	
Nagpur ...	Teak wood auction ...	186	91 6 6	91 6 6	
	Wood other than teak and sal ...	48	72 14 0	72 14 0	
	Building wood cart loads ...	481	1,040 1 6	1,040 1 6	
	Do. head loads ...	2,388	517 5 5	517 5 5	
	Do. number ...	81,670	2,800 8 0	2,800 8 0	
	Do. contract ...	...	60 0 0	60 0 0	
	Total ...	84,773	4,582 3 5	4,582 3 5	
	Firewood cart loads ...	6,833	1,761 6 0	1,761 6 0	
	Do. head do. ...	12,720	423 3 0	423 3 0	
	Do. contract ...	...	1,664 4 0	1,664 4 0	
	Do. number ...	103	20 6 9	20 6 9	
	Total ...	21,220	3,869 3 9	3,869 3 9	
	Bamboos cart loads ...	84	213 11 0	213 11 0	
	Do. head do. ...	3,547	558 7 6	558 7 6	
	Do. number ...	255	14 4 6	14 4 6	
	Total ...	3,986	786 7 0	786 7 0	
	Grass head loads ...	1,629	51 1 6	51 1 6	
	Do. birs contract ...	...	1,496 0 0	1,496 0 0	
	Do. cart do. ...	722	194 5 0	194 5 0	
	Grazing buffaloes ...	5,535	14,207 14 0	14,199 14 0	
	Do. cows ...	89,775			
	Do. sheep ..	36,891			
	Total ...	1,34,574	15,949 4 6	15,941 4 6	
	Store quarry contract ...	...	102 0 0	82 0 0	
	Forest Minor Produce contract ...	...	2,319 8 0	2,319 8 0	
	Total ..	..	2,421 8 0	2,401 8 0	
Balaghat ... Bhandara ... Jubbulpore.... Mandla ... Narsinghpur.. Raipur ... Bilaspur ... Sambalpur.....	R II.—Commutation ...	...	39,231 10 0	39,231 10 0	No details have been furnished by Deputy Commissioner as to quantities of produce removed by consumers.
	R II.—A. Timber ...	...	40,329 10 1	40,329 10 1	
	R II.—B. Firewood and charcoal ...	..	31,272 8 1	31,272 8 1	
	R II.—C. Bamboos ...	...	12,657 7 7	12,657 7 7	
	R II.—D. Grazing and grass ...	...	1,26,101 5 11	1,26,101 5 11	
	R II.—E. Other Minor Produce ..	...	29,136 1 2	29,136 1 2	
	Total ...	...	2,78,728 10 10	2,78,728 10 10	
	Grand Total ...	...	8,73,095 6 7	8,72,710 14 11	
	Deduct outstanding of the year 1883-84 ..	...	384 7 8	.....	
		...	8,72,710 14 11	8,72,710 14 11	
	Add outstanding of 1882-83 realised in 1883-84 ..	...	1,328 15 8	1,328 15 8	
	Total under R II. ...	...	8,74,039 14 7	8,74,039 14 7	

FORM

FOREST DEPARTMENT,

Revenue derived from and Expenditure incurred on Timber and other

Name of Department.	Particulars of supplies.	Amount supplied.		Rate.	
		Number.	Cubic feet.	At.	Per.
				Rs. a. p	
Public Works Deparment, Jubbulpore Division, Central Provinces ...	Boats ...	1	.....	13 6 0	Boat.
	Firewood ..	823	.....	0 1 0	Maund.
Wardha Coal State Railway.	Teak furdays ...	27	238·788	1 12 0	c. feet.
	Teak scantlings ...	105	89·101	1 4 0	c. feet.
	Do. ..	30	43·879	1 2 0	c. feet.
	Teak planks ..	2	1·058	1 8 0	c. feet.
	Do. ...	5	2·701	1 12 0	c. feet.
	Do. ...	3	1·996	2 0 0	c. feet.
	Saj planks ...	17	12·914	0 12 0	c. feet.
	S. B. G. sleepers ...	1,100	3,472·222	4 0 0	Sleeper,
	Teak poles ...	3	.....	0 8 0	each.
	Askoods ...	23	.. ...	0 4 0	each.
	Bhera wood props ..	9	50·782	0 10 0	c. feet.
	Garari props ...	7,258	23,407·072	6 10 0	c. feet.
	Tendu props ..	256	857 195	9 9 0	c. feet.
	Seena props ...	22	69·429	0 9 0	c. feet.
	Aonla props ..	68	264·404	0 9 0	c. feet.
	Mokha props ...	17	63·063	0 9 0	c. feet.
	Dhaora props ...	45	143·130	0 9 0	c. feet.
	Bijasal logs ...	1	18 750	1 0 0	c. feet,
	Bambus ..	75	.....	4 0 0	100
	Do. ...	262	.....	4 2 0	100
Nagpur and Chhattisgarh State Railway ...	Teak sleepers ...	2,330	3881·492	3 4 0	each,
	Saj sleepers ...	4,722	7867·226	1 12 0	each.
Executive Engineer, Kanhan Division ...	Teak furdays ...	2	3·991	1 12 0	c. feet.
	Teak scantlings ...	3	2·238	1 4 0	c. feet.
	Do. ...	2	1·727	1 2 0	c. feet.
Central Jail, Nagpur ...	Satin logs ...	50	162·249	0 12 0	c. feet.
Jail Deparment, Wardha ...	Grass pullas ...	5,000	.....	8 0 0	1,000
	Do. ...	5,000	.....	7 8 0	1,000
	Total ...	27,291	40660·407	.....	...

No. 64.

CENTRAL PROVINCES.

produce sold to Public Departments from Depots during the year 1883-84.

Amount of Revenue.			Cost to Forest Department.			Comparison of Revenue and Expenditure.	
Due.	Received.	Outstanding.	Timber expenses under A 1.	Quota of all other expenditure chargeable against Timber.	Total.	Surplus.	Deficit.
Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
10 6 0	13 6 0	.....	10 0 0	.....	10 0 0	3 6 0	.....
51 7 0	51 7 0	.....	22 10 1	.....	22 10 1	28 12 11	.....
417 13 11	417 13 11	.....					
112 8 3	112 8 3	.....					
49 5 9	49 5 9	.....					
1 9 4	1 9 4	.....	4,520 15 3	281 10 10	4,808 10 1	191 1 6	.....
4 11 7	4 11 7	.....					
3 15 10	3 15 10	.....					
9 10 11	9 10 11	.....					
4,400 0 0	4,400 0 0	.....					
1 8 0	1 8 0	.....	0 4 9				
5 12 0	5 12 0	.....	2 14 0				
31 11 10	31 11 10	.....	14 1 0				
14,629 6 5	14,629 6 5	.....					
482 2 8	482 2 8	.....					
39 0 10	39 0 10	.....	6,447 3 0	156 10 9	6,631 11 6	8,855 2 1	.....
148 11 6	148 11 6	.....					
35 7 5	35 7 5	.....					
80 8 0	80 8 0	.....					
18 12 0	18 12 0	.....	5 10 0				
3 0 0	3 0 0	.....	5 0 0				
10 12 11	10 12 11	.....					
7,572 8 0	7,572 8 0	.....	13,516 6 6	841 0 4	14,357 6 10	1,478 9 2	.....
8,263 8 0	8,263 8 0	.....					
15 11 8	15 11 8	.....	15 3 9	0 15 2	16 2 11	4 4 7	.....
2 12 9	2 12 9	.....					
1 15 1	1 15 1	.....					
121 10 11	121 10 11	.....	45 0 0	.....	45 0 0	76 10 11	.....
40 0 0	40 0 0	.....	.....	37 6 0	37 6 0	40 8 0	.....
37 8 0	37 8 0	.....	.....				
36,607 0 7	36,607 0 7	.....	24,611 4 4	1,317 5 1	25,928 9 5	10,678 7 2	.....

FORM No. 65.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Abstract showing the values of timber and other produce at sale Depots for the year 1883-84.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in the value.		Remarks.
	No.	Cubic ft.	Value.	No.	Cubic ft.	Value.	In favour of the year.	Against the year.	
Logs round ... Teak	...	...	...	37	913	920	...	...	
Logs round ... Sal	...	...	...	1	17	21	...	...	
Logs other than Teak and Sal	27	95	50	6	34	12	...	...	
Teak scantlings	6,031	6,952	5,668	6,135	6,864	7,724	...	...	
Sal scantlings	292	468	468	50	34	34	...	...	
Sleepers ... Teak	...	...	...	2,293	3,820	3,820	...	...	
Sleepers ... Sal	14	95	37	1,557	5,322	6,130	...	...	
Sleepers other than Teak and Sal	...	...	..	2,668	9,263	10,672	...	...	
Teak slabs	871	3,211	4,725	808	2,945	3,313	...	...	
Teak planks	590	205	307	4,940	2,151	3,228	...	...	
Planks other than Teak and Sal	3,418	1,101	695	2,763	711	533	...	...	
Pieces marketable ... Teak	1	...	...	64	...	10	...	...	
Pieces marketable ... Sal	2	...	...	2	...	...	...	...	
Pieces marketable other than Teak and Sal.	757	...	231	6,203	...	1,423	...	...	
Teak poles	294	...	121	918	...	304	...	...	
Poles other than Teak and Sal	5,603	...	105	7,327	...	406	...	...	
Boats	13	...	130	2	...	20	...	...	
Total	17,913	12,127	12,532	35,774	32,074	38,570	2,6038	...	

Fuel, bundles	...	6	.....	6	...	...	...	...	...
Fuel, maunds	...	195	.....	49	208	...	69	...	...
Fuel, Head loads	...	.....	.....	.....	5	...	1	...	...
Charcoal, maunds	...	9	.....	9	...	...	...	...	...
Total	...	210	.....	64	213	...	70	6	...
Bamboos	...	16,082	.....	415	18,167	...	491	...	...
Total	...	16,082	.....	415	18,167	...	491	76	...
Bhibas, maunds	...	2	.....	1	...	...	...	...	...
Gum, maunds	...	1	.....	4	...	...	...	...	...
Grass, poolas	..	1,37,069	.....	1,078	1,48,612	...	1,040	...	...
Kosa	...	127	.....	1	...	...	...	...	...
Thorns, karas load	...	...	.....	.....	12	...	6	...	...
Total	...	1,37,199	.....	1,084	1,48,624	...	1,046	...	38
Grand Total	...	1,71,404	12,127	140,295	2,02,778	32,074	40,177	26,120	3
Elephants	...	6	.....	3,646	6	...	3,282		...
Other live-stock	...	206	.....	2,543	163	...	1,634	...	...
Machinery	..	...	.....	18,964	...	...	17,255	...	...
Other dead-stock	...	...	.....	20,884	...	...	18,334	...	
Total	...	212	.....	46,037	169	...	40,505	...	5,532
Grand Total	...	1,71,616	12,127	60,132	2,02,947	32,074	80,682	26,120	5,570

APPENDICES.

Statement showing the actual condition of boundaries and boundary marks of the first class reserves in the Central Provinces on the 31st March 1884.

1	2	3									4									5									6			7		8		9		10
Division.	Reserves.	Length of Boundaries.									Boundary lines cleared during the year.									Boundary lines remaining uncleared at close of the year.									Total of columns 4 and 5.			Total No. of boundary marks.		No. in good repair at close of 1883-84.		No. in bad repair at close of 1883-84.		REMARKS.
		External.			Internal.			Total.			For protection from fire.			For demarcation.			Total.			Artificial.			Natural such as nala, river or streams &c.			Total.													
		Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Masonry pillars.	Other marks.	Masonry pillars.	Other marks.	Masonry pillars.	Other marks.	
Direction	Hathibari ...	12	6	7	...	...	...	12	6	7	3	4	8	4	7	1	8	3	9	...	...	...	4	2	8	4	2	8	12	6	7	11	...	11	...	...	...	
	Kuntranala ...	14	6	0	...	...	...	14	6	0	4	2	6	6	0	3	10	2	9	...	...	...	4	3	1	4	3	1	14	6	...	14	...	13	...	1	...	
	Total ...	27	4	7	...	...	...	27	4	7	7	7	4	10	7	4	18	6	8	...	...	...	8	5	9	8	5	9	27	4	7	25	...	24	...	1	...	
Mandla Division.	Bunjar Valley ...	43	6	3	...	...	...	43	6	3	43	6	3	...	...	...	43	6	3	...	...	...	...	...	...	...	...	...	43	6	3	...	141	...	141	...	...	
	Motinala ...	7	0	1	...	...	...	7	0	1	4	6	2	...	...	...	4	6	2	...	...	...	2	1	9	2	1	9	7	0	1	...	19	...	19	...	...	
	Airi ...	5	7	4	...	...	...	5	7	4	1	4	4	...	...	...	1	4	4	...	...	...	4	3	0	4	3	0	5	7	4	3	...	3	...	...	...	
	Chuharigogarh ...	5	5	5	...	...	...	5	5	5	5	5	5	...	...	...	5	5	5	...	...	...	...	...	...	...	...	...	5	5	5	10	...	10	...	...	...	
	Jugmandal ...	40	7	0	...	...	...	40	7	...	40	7	...	...	...	...	40	7	...	...	...	...	...	...	...	...	...	...	40	7	0	71	...	71	...	...	...	
	Barela ...	13	5	4	...	...	...	13	5	4	13	5	4	...	...	...	13	5	4	...	...	...	...	...	...	...	...	...	13	5	4	55	...	55	...	...	...	
	Singrampur ...	8	7	1	...	...	...	8	7	1	8	7	1	...	...	...	8	7	1	...	...	...	...	...	...	...	...	...	8	7	1	45	...	45	...	...	...	
	Kitowli ...	25	5	5	...	...	...	25	5	5	25	5	5	...	...	...	25	5	5	...	...	...	...	...	...	...	...	...	25	5	5	54	...	54	...	...	...	
	Muchmacha ...	24	4	2	...	...	...	24	4	2	16	3	6	...	...	...	16	3	6	...	...	...	8	0	6	8	0	6	24	4	2	56	...	56	...	...	...	
	Sootri ...	9	3	9	...	...	...	9	3	9	9	3	9	...	...	...	9	3	9	...	...	...	...	...	...	...	...	...	9	3	9	16	...	16	...	...	...	
	Bijpura ...	17	0	0	...	...	...	17	0	0	...	...	...	17	0	0	17	0	0	...	...	...	...	...	...	...	...	...	17	0	0	...	150	...	150	...	...	
	Lower Gour ...	33	3	0	...	...	...	33	3	0	7	5	9	25	5	1	33	3	0	...	...	...	...	...	...	...	...	...	33	3	0	...	312	...	312	...	...	
	Topla ...	37	4	0	...	...	...	37	4	0	...	...	...	37	4	0	37	4	0	...	...	...	...	...	...	...	...	...	37	4	0	...	108	...	108	...	...	
	Keoli Kapa ...	19	4	5	...	...	...	19	4	5	...	...	...	19	4	5	19	4	5	...	...	...	...	...	...	...	...	...	19	4	5	...	71	...	71	...	...	
	South Phen ...	41	7	1	...	...	...	41	7	1	...	...	...	41	7	1	41	7	1	...	...	...	...	...	...	...	...	...	41	7	1	...	129	...	129	...	...	
	North Phen ...	21	2	2	...	...	...	21	2	2	...	...	...	...	...	...	...	...	...	...	...	...	21	2	2	21	2	2	21	2	2	...	36	...	36	...	...	
	Total ...	356	1	2	...	...	...	356	1	2	178	4	8	141	4	7	320	1	5	...	...	...	35	7	7	35	7	7	356	1	2	310	966	310	966	...	...	

Hosangabad Dn.	Rajaborari ...	107	2	0	..	...	..	107	2	0	51	5	1	49	7	2	101	4	3	...	..	...	5	5	7	5	5	7	107	2	0	17	377	6	377	11	...	
	Saonligarh ...	74	1	9	...	..	.	74	1	9	39	1	9	24	0	4	63	2	3	...	...	...	10	7	6	10	7	6	74	1	9	30	83	10	83	20	...	
	Bori ...	57	6	1	..	...	..	57	6	1	57	6	1	...	..	.	57	6	1	...	...	...	...	...	...	...	..	...	57	6	1	11	9	8	...	3	...	
	Total ...	239	2	0	..	...	...	239	2	0	148	5	1	73	7	6	222	4	7	...	...	..	16	5	3	16	5	3	239	2	0	58	469	24	460	34	...	
Nimar Division.	Kalibheet ...	94	0	0	45	2	5	139	2	5	16	4	0	90	4	5	107	0	5	3	2	0	29	0	0	32	0	0	139	2	5	6	812	...	25	6	787	
	Punassa ..	84	6	7	...	..	..	84	6	7	40	2	3	..	...	...	46	2	3	...	.	...	38	4	4	38	4	4	84	6	7	23	367	19	367	4	..	
	Chandgarh ...	50	0	4	..	..	...	50	0	4	27	7	1	...	...	...	27	7	1	5	2	9	16	6	4	22	1	3	50	0	4	5	13	...	13	5	...	
	Khandwa ..	59	3	6	18	7	1	78	2	7	48	2	7	...	...	...	48	2	7	24	0	0	6	0	0	30	0	0	78	2	7	27	1,194	19	1,194	8	...	
	Susarda ...	5	7	8	...	..	...	5	7	8	...	...	...	5	4	0	5	4	0	...	...	...	0	3	8	0	3	8	5	7	8	8	62	8	57	...	5	
	Kanapur ..	25	6	6	...	..	...	25	6	6	...	...	...	20	1	4	20	1	4	...	..	.	5	5	2	5	5	2	25	6	6	23	79	22	71	1	...	
	Baidya ..	17	4	4	..	...	...	17	4	4	...	...	...	14	6	7	14	6	7	...	...	.	2	5	7	2	5	7	17	4	4	19	313	19	313	...	...	
	Undria Baoria...	9	7	0	...	...	..	9	7	0	5	6	6	...	...	..	5	6	6	...	...	...	4	0	4	4	0	4	9	7	0	12	153	9	153	3	...	
	Bhojwa ...	5	1	5	...	...	..	5	1	5	1	3	3	...	...	...	1	3	3	...	...	...	3	6	2	3	6	2	5	1	5	1	43	...	42	1	1	
	Baheria ..	7	0	0	..	..	..	7	0	0	6	1	4	...	...	...	6	1	4	...	...	...	0	6	6	0	6	6	7	0	0	6	123	5	123	1	..	
	Telia ..	3	3	5	...	...	...	3	3	5	...	...	...	3	3	5	3	3	5	...	..	...	...	...	...	...	...	..	3	3	5	5	233	5	233	..	.	
	Borari ...	8	3	7	..	...	...	8	3	7	...	..	..	8	3	7	8	3	7	.	...	...	...	...	...	...	...	...	8	3	7	6	233	6	233	..	.	
	Dehgaon ...	...	...	...	..	...	...	...	...	.	...	...	...	...	..	...	...	..	...	..	...	...	...	...	...	...	.	...	...	...	...	...	...	..	...	...	...	Not yet surveyed.
	Chaoria ...	3	2	6	..	...	..	3	2	6	1	5	8	...	...	...	1	5	8	...	...	...	1	4	8	1	4	8	3	2	6	4	16	4	16	.	...	
	Bainpura ..	3	5	7	...	...	...	3	5	7	3	0	2	..	..	.	3	0	2	...	...	...	0	5	5	...	5	5	3	5	7	4	17	4	17	..	..	
	Gunjri ...	...	..	.	..	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	.	...	...	...	...	...	..	Not completely demarcated.
	Ajual ...	12	5	6	..		..	12	5	6	7	7	8	..	...	.	7	7	8	..	...	...	4	5	8	4	5	8	12	5	6	7	156	7	156	...	..	
	Purni ..	...	...	...	...	..	..	...	.	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...	...	...	...	..	...	Not demarcated.
	Dohad ..																																					
	Kharda ...	3	5	3	...	...	..	3	5	3	...	...	..	2	1	5	2	1	5	...	...	..	1	3	8	1	3	8	3	5	3	5	85	5	85	...	...	
	Audhali ...	6	3	3	...	.	..	6	3	3	...	...		4	3	8	4	3	8	..	.	...	1	7	5	1	7	5	6	3	3	5	64	5	64	...	..	
	Singaji ..	...	...	.	...	...	...	...	...	..	..	..	...	...	.	...	...	...	...	..	...	...	...	..	...	...	...	..	...	..	...	...	...	...	...	...	...	Not demarcated.
	Dehri ..	...	...	...	..	...	..	...	...	.	...	...	..	..	..	..	...	...	...	..	...	...	..	...	...	..	...	...	...	...	..	...	...	...	...	...	..	
	Amba ..	...	...	.	...	...	...	..	...	..	...		.	..	...	..	...	...	..	.	...	.	...	...	..	...	...	...	...	...	..	..	...	...	...	..	..	
	Mandwa ..	55	2	0	...	...	.	55	2	0	...	.	.	34	4	8	34	4	8	...	...	...	20	5	2	20	5	2	55	2	0	...	...	...	...	...	...	
	Gondwana ...	97	0	9	...	...	..	97	0	9	...	...	...	19	3	5	19	3	5	36	2	5	41	2	9	77	5	4	97	0	9	...	...	...	...	...	...	
	Shamardeo ..	45	4	9	.	.	..	45	4	9	...	...	...	14	6	1	14	6	1	..	..	...	30	6	8	30	6	8	45	4	9	...	...	...	...	...	...	
	Ichadevi ..	21	0	8	...	.	...	21	0	8	...	.	..	11	7	3	11	7	3	9	1	5	...	..	...	9	1	5	21	0	8	...	...	...	...	...	..	
	Jambupani ...	...	...	...	...	.	...	...	..	...	...	.	..	..	.	.	...	...	...	..	...	...	..	...	...	...	...	.	...	...	.	...	...	...	...	...	...	Not demarctaed.
	Total ...	620	4	3	64	1	6	684	5	9	165	1	2	230	2	8	395	4	0	78	0	9	211	1	0	289	1	9	684	5	9	166	3,963	137	3,162	29	793	
Hoful Division.	Bowergarh ..	73	6	4	15	2	0	89	0	4	47	4	3	32	4	0	80	0	3	.	...	..	9	.	1	9	0	1	89	0	4	65	68	25	5	...	..	
	Khamapur ...	157	0	0	28	0	0	185	0	0	11	4	3	102	0	0	113	4	3	.	...	...	71	3	7	71	3	7	185	0	0	55	1,336	4	...	...	...	
	Total ...	230	6	4	43	2	0	274	0	4	59	0	6	134	4	0	193	4	6	.	.	...	80	3	8	80	3	8	274	0	4	120	1,401	29	5	...	...	

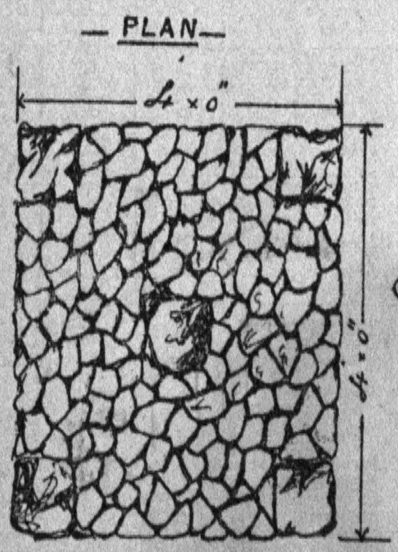
Appendix A.—(Contd.)

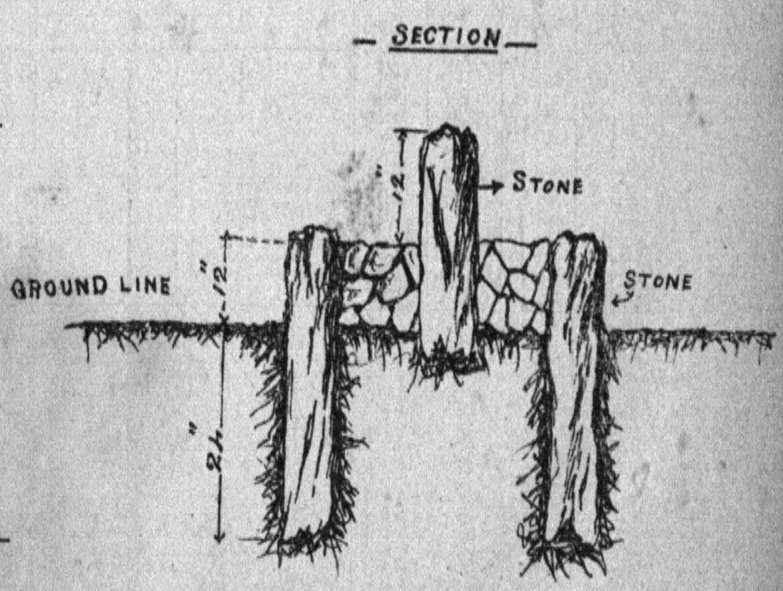
1	2	3									4									5									6			7		8		9	
Division.	Reserves.	Length of Boundaries.									Boundary lines cleared during the year.									Boundary lines remaining uncleared at close of the year.									Total of columns 4 & 5.			Total No. of boundary marks.		No. in good repair at close of 1883-84.		No. in bad repair at close of 1883-84.	
		External.			Internal.			Total.			For protection from fire.			For demarcation.			Total.			Artificial.			Natural such as nala, river or streams, &c.			Total.						Masonry pillars.	Other marks.	Masonry pillars.	Other marks.	Masonry pillars.	Other marks.	Remarks.
		Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.	Miles.	Furlongs.	Chains.							
Chanda Division.	Bhimarum ...	28	0	0	...	...	...	28	0	0	28	0	0	...	...	...	28	0	0	...	...	...	...	...	...	...	...	...	28	0	0	...	67	..	67	...	...	
	Mirkulloo ...	32	3	0	...	...	...	32	3	0	32	3	0	...	...	...	32	3	0	...	...	..	...	...	...	...	...	...	32	3	0	...	151	...	151	..	...	
	Moharli ...	132	5	2	30	0	0	162	5	2	30	4	6	132	0	6	162	5	2	...	...	...	..	...	...	...	...	..	162	5	2	...	1,323	...	1,323	...	...	
	Total ...	193	0	2	30	0	0	223	0	2	90	7	6	132	0	6	223	0	2	...	...	..	...	...	...	..	..		223	0	2	...	1,541	...	1,541	...	...	
Sooni Division.	Sonawani ..	78	6	5	...	...	..	78	6	5	...	...	...	78	6	5	78	6	5	..	..	...	...	.	...	...	...	..	78	6	5	102	...	102	...	.	...	
	Korai ...	67	4	0	...	...	...	67	4	0	67	4	0	...	..	...	67	4	0	...	...	..	...	...	...	...	...	..	67	4	0	86	...	86	...	...	...	
	East Pench ...	86	1	0	...	...	...	86	1	0	29	2	2	56	6	8	86	1	0	...	...	..	...	..	...	...	...	...	86	1	0	63	...	52	...	11	...	
	West Pench ..	105	3	0	...	...	...	105	3	0	50	3	0	55	0	...	105	3	0	...	...	...	...	...	...	...	...	...	105	3	0	...	...	...	...	...	...	
	Total ...	337	6	5	...	...	...	337	6	5	147	1	2	190	5	3	337	6	5	...	...	..	...	...	..	...	...	...	337	6	5	251	...	240	...	11	...	
Saugor Division.	Garhakota ...	10	1	0	...	...	...	10	1	0	7	4	8	2	4	2	10	1	0	...	...	...	...	...	...	...	...	..	10	1	0	9	53	9	53	...	...	
	Tigora ...	5	5	9	...	...	...	5	5	9	2	5	5	3	0	4	5	5	9	...	...	..	...	...	...	...	...	..	5	5	9	...	96	..	96	...	...	
	Ranipara ...	54	2	0	...	..	...	54	2	0	54	2	0	...	...	...	54	2	0	..	...	...	...	..	...	...	...	..	54	2	0	26	630	26	630	..	...	
	Rangir ...	31	4	8	...	...	...	31	4	8	20	2	5	11	2	3	31	4	8	...	...	...	...	..	...	...	..	...	31	4	8	18	310	18	310	.	...	
	Hathkho ...	107	7	8	...	...	...	107	7	8	52	0	0	55	7	8	107	7	8	...	...	...	...	...	...	...	...	...	107	7	8	87	1,258	87	1,258	...	...	
	Total ...	209	5	5	...	...	...	209	5	5	136	6	8	72	6	7	209	5	5	...	...	...	...	...	...	...	..	...	209	5	5	140	2,347	140	2,347	...	...	
Wardha Division.	Dhuga ...	47	0	0	...	...	...	47	..	0	47	0	0	...	...	...	47	0	0	...	...	...	...	...	...	..	...	...	47	0	0	...	...	...	...	...	...	
	Erjhar ...	26	4	0	...	...	...	26	4	0	26	4	0	...	...	...	26	4	0	...	...	..	...	...	..	...	...	..	26	4	0	...	...	..	...	...	...	
	Total ...	73	4	0	...	...	...	73	4	0	73	4	0	...	...	...	73	4	0	...	...	...	...	...	...	...	..	...	73	4	0	...	...	...	...	...	...	
	Grand Total...	2,288	2	8	137	3	6	2,425	6	4	1,007	6	7	986	7	1	1,994	5	8	78	0	9	352	7	7	431	0	6	2,425	6	4	1,070	10,690	904	8,481	75	793	

Appendix B.

Specification of Forest boundary pillars, proposed by Major Doveton, Conservator of Forests, Central Provinces, for the Bilaspur District, Chhattisgarh Division.

The pillars to be 4 feet square, built of rough stones, the four corner stones being long ones should be sunk deep into the ground, and projecting only a foot or 18 inches above the ground; the space between these stones to be filled in by well packed stones of which the middle one should be larger than the rest, (see plan and section below.) Seed of the common date, or that of the fan palm, should then be sown at each corner of the pillar, to serve as further land marks:—





Appendix C.

Statement exhibiting the result of Forest tracts protected from fire during the dry season of 1883-84, compared with the previous year 1882-83.

Division.	Forests.	Area in acres.						Cost of area actually protected.					
		Under protection.		Failures.		Actually protected.		Total.		Per square mile.		Per acre.	
		1882-83.	1883-84.	1882-83.	1883-84.	1882-83	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
	1st Class Reserves.							Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		
Direction ...	Hathibari ...	2,123	2,123	...	...	2,123	2,123	86 12 8	71 5 2	26 2 7	21 8 0	7·849	6·450
	Kuntranala ...	3,548	...	2,883	...	665	...	69 12 4	.....	67 2 4	.....	20·144	...
	Total ...	5,671	2,123	2,883	...	2,788	2,123	156 9 0	71 5 2				
								Average for the	Division ...	35 14 11	21 8 0	10·780	6·450
Mandla ...	Banjar Valley ...	49,495	49,724	...	19	49,495	49,705	596 14 1	721 1 2	7 11 5	9 4 6	2·315	2·785
	Motinala ...	1,659	1,658	...	...	1,659	1,658	56 14 3	78 7 4	21 15 1	30 4 7	6·584	9·086
	Jugmandal ...	24,503	24,503	1,600	31	22,903	24,472	613 1 4	664 12 9	17 2 0	17 6 2	5·139	5·216
	Chuharigogarh ..	1,661	1,660	...	...	1,661	1,660	73 7 4	81 11 4	28 4 10	31 8 0	8·491	9·451
	Barela ...	7,153	7,153	156	...	6,997	7,153	162 6 2	195 14 7	14 13 7	17 8 5	4·456	5·259
	Airi ...	2,150	2,150	...	137	2,150	2,013	43 4 9	52 14 10	12 14 2	16 13 2	3·866	5·048
	Singrampur ...	6,555	6,555	...	...	6,555	6,555	167 11 9	156 9 8	16 6 0	15 4 7	4·913	4·587
	Bijeragogarh ...	21,188	21,188	...	40	21,188	21,148	481 13 6	543 13 4	14 8 10	16 7 3	4·367	4·937
	Lower Gour ...	2,000	5,517	...	...	2,000	5,517	73 2 7	101 10 10	23 6 6	11 12 8	7·023	3·539
	Total ...	1,16,364	1,20,108	1,756	227	1,14,608	1,19,881	2,268 11 9	2,596 15 10				
								Average for the	Division ...	12 10 8	13 13 9	3·800	4·159

Hoshangabad	Rajaborari	..	1,02,720	1,02,720	600	10	1,02,120	1,02,710	763 9 10	1,805 8 7	4 12 7	11 4 0	1·436	3·375
	Saonligarh	...	78,080	78,080	806	960	77,274	77,120	629 0 2	1,151 5 11	5 3 4	9 8 10	1·563	2·866
	Bori	...	39,680	39,680	120	...	39,560	39,680	571 12 0	913 10 4	7 9 4	14 11 9	2·775	4 421
	Total	..	2,20,480	2,20,480	1,526	970	2,18,954	2,19,510	1,964 6 0	3,870 8 10	.....		...	
									Average for the	Division	...	5 11 10	11 4 6	1·723	3·385
Nimar ...	Kalibheet	..	62,080	62,080	122	4	61,958	62,076	335 6 3	331 10 10	3 7 4	3 6 8	1·039	1·026
	Punassa	...	91,920	91,920	4,616	138	87,304	91,782	1,026 9 5	795 7 8	7 8 5	5 8 8	2 258	1·664
	Chandgarh	...	61,440	61,440	268	31,690	61,172	29,750	536 1 3	573 6 2	5 9 9	12 5 4	1·683	3 700
	Khandwa	..	35,840	35,840	1,152	457	34,688	35,383	641 1 5	496 12 7	11 13 2	8 15 9	3·548	2·696
	Bainpura	..	600	600	...	...	600	600	11 1 6	24 0 0	11 13 4	25 9 7	3·550	7·680
	Gunjari	..	3,500	3,500	...	...	3,500	3,500	45 15 11	45 4 11	8 6 6	8 4 6	2·523	2 485
	Undria Baoria	..	3,100	3,100	...	...	3,100	3,100	34 12 8	39 13 11	7 2 11	8 3 8	2·155	2·469
	Bhojwa Beheria	..	2,000	2,000	...	...	2,000	2,000	41 4 0	48 10 0	13 3 2	15 8 11	3·960	4·668
	Ajnal	...	1,500	1,500	8	...	1,492	1,500	20 7 6	27 4 11	8 12 5	11 10 4	2·634	3·495
	Chaoria	..	170	170	...	...	170	170	.....	.....	.....	.....	...	...
	Total	..	2,62,150	2,62,150	6,166	32,289	2,55,984	2,29,861	2,692 11 11	2,382 7 0	.....		...	...
									Average for the	Division	...	6 11 8	6 10 1	2·020	1 990
Berar ..	Bowergarh	..	38,720	38,720	1,558	1,120	37,162	37,600	787 14 6	891 15 11	13 9 1	15 2 11	4·071	4·555
	Khamapur	..	16,000	16,000	...	...	16,000	16,000	263 8 3	277 14 0	10 8 7	11 1 9	3·162	3·334
	Total	..	54,720	54,720	1,558	1,120	53,162	53,600	1,051 6 9	1,169 13 11	.....		...	...
									Average for the	Division	...	12 10 6	13 15 6	3·797	4·191
Chanda ...	Bemarum	..	12,296	12,296	...	18	12,296	12,278	1,198 11 9	1,103 10 11	62 6 3	57 8 5	18·718	17·259
	Mirkulloo	..	8,479	8,479	320	...	8,159	8,479	1,419 6 4	1,230 10 4	111 5 5	92 14 2	33·402	27·866
	Taroba	...	25,619	25,619	...	...	25,619	25,619	1,138 7 3	1,057 11 1	28 7 0	26 6 1	8·532	7·927
	Goverdhun	...	13,931	13,931	...	...	13,931	13,931	617 11 2	512 8 0	28 6 0	23 8 8	8·513	7 063
	Pipal kota	...	...	1,280	...	...	...	1,280	.....	10 0 0	.....	5 0 0	...	1·500
	Total	...	60,325	61,605	320	18	60,005	61,587	4,374 4 6	3,914 8 4	.....	.....	...	...
									Average for the	Division	...	49 10 6	40 10 10	13·997	12 204

Appendix C.—(Contd.)

Division	Forests.	Area in acres.						Cost of area actually protected.					
		Under protection.		Failures.		Actually protected.		Total.		Per square mile.		Per acre.	
		1882-83.	1883-84.	1882-83.	1883-84.	1882-83.	1883-84	1882-83	1883-84.	1882-83.	1883-84.	1882-83.	1883-84.
								Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		
Seoni	... Korai ..	31,210	31,210	...	...	31,210	31,210	532 15 4	532 14 0	10 14 10	10 14 9	3 279	3·278
	Sakata ..	10 020	10,020	...	...	10,020	10,020	171 1 5	124 9 3	10 14 9	7 15 3	3·278	2·387
	East Pench ..	42,580	42,580	...	640	42,580	41,940	616 14 5	620 6 5	9 4 4	9 7 5	2·782	2 840
	Nagulwari ..	9,680	9,680	...	..	9,680	9,680	114 2 0	126 1 0	7 8 8	8 5 4	2 264	2·500
	Parspani ..	8,240	8,240	...	...	8,240	8,240	97 7 11	107 4 0	7 9 2	8 5 3	2·272	2·499
	Narhar ..	39,040	39,040	...	...	39,040	39,040	461 14 3	432 6 0	7 9 2	7 14 6	2·272	2 372
	Total ..	1,40,770	1,40,770	...	640	1,40,770	1,40,130	1,994 7 4	1,993 8 8				
								Average for the Division.		9 1 0	9 1 7	2·720	2·731
Saugor	.. Garhakota ..	2,899	2,899	...	127	2,899	2,772	10 0 0	11 7 9	2 3 4	2 10 4	0·662	0·795
	Hathikho ...	10,598	10,598	...	700	10,598	9,898	232 14 4	310 14 9	14 1 0	20 1 7	4 219	6·031
	Rengir ..	1,987	1,987	90	...	1,897	1,987	40 5 0	51 13 0	13 9 7	16 11 0	4·080	5·007
	Sampura ..	2,720	2,720	...	...	2,720	2,720	79 12 8	64 6 7	18 12 4	15 2 8	5·632	4 550
	Tigora ..	459	459	...	...	459	459	2 8 0	7 3 0	3 7 9	10 0 4	1·046	3·007
	Total ...	18,663	18,663	90	827	18,573	17,836	365 8 0	445 13 1				
								Average for the Division.		12 9 5	15 15 11	3 778	4·799

Wardha	Dhuga	14,171	14,171	8,000	400	6,171	13,771	531 12 9	584 2 5	19 2 2	16 13 7	5·742	5·056
	Erjher	11,911	11,911	300	3,500	11,611	8,411						
	Total	26,082	26,082	8,300	3,900	17,782	22,182	531 12 9	584 2 5				
								Average for the Division		19 2 2	16 13 7	5·742	5·056
	Total 1st Class Reserves	9,05,225	9,06,701	22,599	39,991	8,82,626	8,66,710	15,399 14 0	17,029 3 3	11 2 8	12 9 2	3·350	3 772
	2nd Class Reserves.												
Saugor	Jalundhar	2,885	2,885	...	...	2,885	2,885	116 13 10	40 5 0	24 14 9	8 15 1	7·777	2·633
Balaghat	Pandratola	4,817	4,817	360	4	4,457	4,813	55 1 3	68 1 5	9 14 6	9 0 10	2·378	2·716
	Total 2nd Class Reserves	7,702	7,702	360	4	7,342	7,698	171 15 1	108 6 5	14 15 9	9 0 2	4·496	2·704
	Total of the 1st and 2nd Class Reserves	9,12,927	9,14,403	22,959	39,995	8,89,968	8,74,408	15,571 13 1	17,137 9 8	11 3 1	12 8 8	3·359	3·763

Appendix D.

Comparative Statement of Receipts and Charges in the 1st and 2nd Class Reserved Forests for the years 1882-83 and 1883-84.

Divisions and Districts.	Range.		Receipts.	Charges. Executive, protective and other charges wholly debitable to particular forests.	Charges. Control and other charges not wholly debitable to any particular forests.	Charges. Total.	Surplus.	Deficit.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Direction ..	Direction ...	1882-83 ...	2,634	5,258	34,086	39,344	.....	36,710	
		1883-84 ...	2,599	5,412	29,776	35,188	.....	32,589	
Mandla ..	Bunjar valley ...	1882-83 ..	27,256	15,011	2,439	17,450	9,806	.....	
		1883-84 ..	5,973	13,740	2,789	16,529	.....	10,556	
	Topla ...	1882-83 ...	1,672	426	1,220	1,646	26	.....	
		1883-84 ...	800	345	1,395	1,740	.....	940	
	Keolikapa ...	1882-83 ...	208	331	813	1,144	.....	936	
		1883-84 ...	629	294	930	1,224	.....	595	
	North Phen ...	1882-83 ..	341	341	813	1,154	.....	813	
		1883-84 ...	557	315	930	1,245	.....	688	
	South Phen ...	1882-83 ..	2,098	690	1,220	1,910	188	.....	
		1883-84 ..	1,060	493	1,394	1,887	.....	827	
	Moti nalla ...	1882-83 ..	172	364	406	770	.....	598	
		1883-84 ...	497	399	465	864	.....	367	
	Jagmandal ...	1882-83 ...	509	1,845	1,220	3,065	.....	2,556	
		1883-84 ...	166	1,653	1,395	3,048	.....	2,882	
	Chuharigogarh ...	1882-83 ...	84	384	407	791	.....	707	
		1883-84 ...	387	400	465	865	.....	478	
	Airi ...	1882-83 ..	25	206	406	612	.....	587	
		1883-84 ...	...	200	464	664	.....	664	
	Barela ...	1882-83 ...	273	1,294	812	2,107	.....	1,834	
		1883-84 ..	1,704	2,156	930	3,086	.....	1,382	
	Lower Gour ...	1882-83 ...	1,074	1,614	407	2,021	.....	947	
		1883-84 ..	1,209	1,972	465	2,437	.....	1,228	
	Bijeragogarh ...	1882-83 ..	552	1,915	1,220	3,135	.....	2,583	
		1883-84 ...	1,204	2,300	1,395	3,695	.....	2,491	
	Singrampur ...	1882-83 ...	582	1,371	1,220	2,591	.....	2,009	
		1883-84 ...	1,259	1,585	1,395	2,980	.....	1,721	
	Total ...	1882-83 ..	34,846	25,792	12,604	38,396	.....	3,550	
		1883-84 ...	15,445	25,852	14,412	40,264	.....	24,819	

Hoshangabad Division	Bori		1882-83	69	1,305	472	1,777	...	1,708
			1883-84	201	1,638	522	2,160	...	1,959
	Rajaborari		1882-83	15,829	2,286	2,056	4,342	11,487	...
			1883-84	17,795	4,992	2,755	7,747	10,048	...
	Saouligarh		1882-83	9,567	2,197	1,430	3,627	5 940	...
			1883-84	8,775	3,645	1,675	5,320	3,455	...
		Total	1882-83	25,465	5,788	3,958	9,746	15,719	...
			1883-84	26,771	10,275	4,952	15,227	11,544	...
Betul Division	Bowergarh		1882-83	8,017	2,148	1,228	3,376	4,641	...
			1883-84	6,017	3,827	1,358	5,185	832	...
	Khamapur		1882-83	5,837	2,291	1,278	3,569	2,268	...
			1883-84	7,330	2,669	1,342	4,011	3,319	...
		Total	1882-83	13,854	4,439	2,506	6,945	6,909	...
			1883-84	13,347	6,496	2,700	9,196	4,151	...
Nimar Division	Kalibheet		1882-83	14,362	2,369	2,617	4,986	9,376	...
			1883 84	10,275	2,061	1,282	3,343	6,932	...
	Punassa		1882-83	5,301	5,185	2,214	7,399	...	2,098
			1883-84	4,426	5,082	1,094	6,176	...	1,750
	Chandgarh		1882-83	3,969	1,189	933	2,122	1,847	...
			1883-84	4,527	1,292	575	1,867	2,660	...
	Khandwa		1882-83	3,420	5,181	1,789	6,970	...	3,550
			1883-84	3,464	5,380	932	6,312	...	2,848
		Total	1882-83	27,052	13,924	7,553	21,477	5,575	...
			1883-84	22,692	13,815	3,883	17,698	4,994	...
Chanda Division	Ahiri		1882-83	22,907	29,718	2,995	32,713	...	9,806
			1883-84	26,314	20,623	3,538	33,161	...	6,847
	Moharli		1882-83	26,770	9,182	1,915	11,097	15,673	...
			1883-84	40,156	15,863	3,314	19,177	20,979	...
		Total	1882-83	49,677	38,900	4,910	43,810	5,867	...
			1883-84	66,470	45,486	6,852	52,338	14,132	...

Appendix D.—Contd.

Divisions and Districts.	Range.		Receipts.	Charges. Executive, protective and other charges wholly debitable to particular forests.	Charges. Control and other charges not wholly debitable to any particular forests.	Charges. Total.	Surplus.	Deficit.	Remarks.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Seoni Division	Korai	1882-83	5,988	3,208	1,308	4,516	1,472	.....	
		1883-84	5,131	3,502	1,482	4,984	147	.....	
	Sonawani	1882-83	6,702	1,877	1,012	2,889	3,813	.....	
		1883-84	6,567	1,862	1,127	2,989	3,578	.....	
	West Pench	1882-83	7,408	1,841	1,083	2,924	4,484	.....	
		1883-84	5,465	2,524	1,622	4,146	1,319	.....	
	East Pench	1882-83	4,889	2,364	1,373	3,737	1,152	.....	
		1883-84	6,550	2,118	1,233	3,351	3,199	.....	
	Total	1882-83	24,987	9,290	4,776	14,066	10,921	.....	
		1883-84	23,713	10,006	5,464	15,470	8,243	.....	
Saugor Divison	Garhakota	1882-83	1,907	1,154	226	1,380	527	.....	
		1883-84	1,838	798	248	1,046	792	.....	
	Tigora	1882-83	421	125	168	293	128	.....	
		1883-84	331	192	53	245	86	.....	
	Ranipure	1882-83	1,220	948	95	1,043	177	.....	
		1883-84	1,552	676	245	921	631	.....	
	Rangir	1882-83	2,260	449	188	637	1,623	.....	
		1883-84	2,268	438	249	687	1,581	.....	
	Hathkho	1882-83	2,807	1,374	368	1,742	1,065	.....	
		1883-84	2,762	1,548	534	2,082	680	.....	
	Total	1882-83	8,615	4,050	1,045	5,095	3,520	.....	
		1883-84	8,751	3,652	1,329	4,981	3,770	.....	
	Total 1st Class Reserves	1882-83	1,87,130	1,07,441	71,438	1,78,879	8,251	.....	
		1883-84	1,79,788	1,20,994	69,368	1,90,362	...	10,574	

Nagpur District ..	Nagpur ..	1882-83 ...	28,109	8,200	7,420	15,620	12,483	...
		1883-84 ...	30,219	8,220	8,600	16,820	13,399	...
Bhandara „ ..	Bhandara ...	1882-83 ...	53,225	7,209	...	7,209	46,016	...
		1883-84 ...	54,930	7,332	...	7,332	47,598	...
Wardha „ ..	Wardha .	1882-83 ...	25,330	10,143	1,821	11,964	13,366	...
		1883-84 ...	26,827	9,774	3,294	13,068	13,759	...
Chanda „ ...	Chanda ...	1882-83 ...	85,052	12,722	6,986	19,708	65,344	...
		1883-84 ...	97,749	16,430	9,524	25,954	71,795	...
Balaghat „ ...	Balaghat ...	1882-83 ...	36,005	9,758	...	9,758	26,247	...
		1883-84 ..	36,607	10,667	...	10,667	25,940	...
Jubbulpore „ ..	Jubbulpor ...	1882-83 ..	19,487	5,088	...	5,088	14,399	...
		1883-84 ..	19,230	5,773	...	5,773	13,457	...
Saugor „ ..	Saugor ...	1882-83 ...	60,975	13,989	6,144	20,133	40,842	...
		1883-84 ...	65,948	13,203	8,276	21,479	44,469	...
Damoh ...	Dam[illegible] ...	1882-83 ...	62,486	13,678	..	13,678	48,808	...
		1883-84 ...	61,588	14,183	...	14,184	47,405	...
Seoni „ ...	Seoni ..	1882-83 ...	48,852	9,036	6,877	15,913	32,939	...
		1883-84 ...	51,049	9,213	7,946	17,159	33,890	...
Mandla „ ..	[illegible]dla ...	1882-83 ...	91,245	15,781	...	15,781	75,464	...
		1883-84 ...	85,950	16,309	...	16,309	69,641	...
Hoshangabad „ ...	Hoshangabad ..	1882-83 ...	58,190	13,365	9,405	22,770	35,420	...
		1883-84 ...	58,391	13,904	9,591	23,495	34,896	...
Nimar „ ...	Nimar ...	1882-83 ...	45,923	10,365	11,126	21,491	24,432	...
		1883-84 ...	42,088	17,730	7,100	24,830	17,258	...
Betul „ ...	Betul ...	1882-83 ...	41,572	7,062	5,957	13,019	28,553	...
		1883-84 ...	48,574	9,456	6,368	15,824	27,750	...
Narsinghpur „ ...	Narsinghpur ..	1882-83 ...	14,699	3,712	...	3,712	10,987	...
		1883-84 ...	14,438	4,192	...	4,192	10,246	...
Chhindwara „	Chhindwara ...	1882-83 ...	29,977	8,232	...	8,232	21,745	...
		1883-84 ...	29,358	8,751	...	8,751	20,607	...
Raipur „ ...	Raipur ...	1882-83 ..	54,548	9,308	3,905	13,213	41,335	...
		1883-84 ...	54,805	9,204	913	10,117	44,688	...
Bilaspur „ ...	Bilaspur ...	1882-83 ...	20,391	2,937	3,905	6,842	13,549	...
		1883-84 ...	23,320	3,247	912	4,159	19,161	...
Sambalpur „ ...	Sambalpur ...	1882-83 ...	14,457	5,333	3,905	9,238	5,219	...
		1883-84 ...	18,911	4,670	913	5,583	13,328	...
	Total 2nd Class Reserves ...	1882-83 ...	7,90,517	1,65,918	67,451	2,33,369	5,57,148	...
		1883-84 ...	8,14,982	1,82,258	63,437	2,45,695	5,69,287	...
	Grand Total ..	1882-83 ...	9,77,647	2,73,359	1,38,889	4,12,248	5,65,399	...
		1883-84 ...	9,94,770	3,03,252	1,32,805	4,36,057	5,58,713	...

Appendix E.

FOREST DEPARTMENT, CENTRAL PROVINCES.

Statement of Forest Buildings in the Central Provinces costing over Rs. 200 each at the close of 1883-84.

Division.	Situation.	Description of buildings.	Original cost. Of buildings on hand at commencement of the year.	Original cost. Of buildings constructed during the year.	Cost of repairs during the year.	Rent realized in 1883-84.	Remarks.
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	
Mandla ...	Kitoli ...	... Rest house, 1 room and verandah, kutcha brick walls	400 0 0	.....	5 5 0	.....	
Do. ...	Kisli ...	... Store house, 4 rooms and verandah, pucka brick walls	446 0 0	.....	.....	.....	
Nimar ...	[illegible]non ...	... Pucka rest house	1,182 8 8	.....	.....	.....	
Do. ...	Punassa ...	... Do.	629 10 0	.....	69 3 0	.....	
Do. ...	Head Quarters ...	... Small pucka bungalow	4,054 0 0	.....	120 0 0	.....	
Chanda ...	Chanda Civil Station	. Terrace roof bungalow	8,000 0 0	.....	122 11 0	315 7 9	
Do. ...	Meharli ...	... Rest house	500 0 0	.....	28 7 0	.....	
Do. ...	Ilapilli ...	... Do.	300 0 0	.....	7 7 8	5 11 6	
Seoni ...	Korai ...	... Small pucka inspection bungalow ...	1,000 0 0	.....	30 10 6	.....	
Saugor ...	Garhakota ...	... Pucka inspection bungalow ...	1,000 0 0	.....	.....	.....	
Do. ...	Do. ...	... Four roomed barrack kutcha ...	210 0 0	.....	.....	.....	

NOTE.—The Hoshangabad Forest building which has hitherto appeared in the returns, has been sold by public auction with the Chief Commissioner's sanction as per his Secretary's letter No. 3895-201, dated 8th September 1883.

No. 206 F., dated Simla, the 2nd April 1884.

From—A. MACKENZIE, Esq., C.S., Secretary to the Government of India,

To—The Chief Commissioner of the Central Provinces.

I AM directed to acknowledge the receipt of Mr. Laurie's letter No. 5006—277, dated the 19th November last, submitting the Report of Forest Administration in the Central Provinces for the year 1882-83, with your review thereof.

Area and Boundaries.

2. The changes made during the year in the area under the management of the Department were as follow :—

Class of Forests.	Area, in Square Miles.		
	At the commencement of the year.	Added or excluded.	At the close of the year.
First Class Reserves	2,588	+5	2,593
Second ditto	16,842	—5	16,837
Total Reserves ...	19,430	.....	19,430
District Forests	289	+29	318
Grand Total ...	19,719	+29	19,748

Five square miles were transferred from the second to the first class Reserves, and the District Forests were increased by 29 square miles, chiefly in consequence of resumptions and purchases in the Balaghat District.

The transfers from the second to the first class Reserves are as yet insignificant; but, as you have already urged more vigorous action in this matter on the Conservator of Forests, it is not necessary to enter more fully upon the subject in this place.

3. His Excellency the Governor General in Council notices with satisfaction that you have arranged to push on the proper demarcation of the Reserves, and hopes that the Report for 1883-84 will show considerable progress in this respect. The work is of great importance, as a proper demarcation is the first step towards successful forest conservancy. It is presumed that the work will extend to the marking off, with substantial boundary marks, of all cultivation which it may be decided to continue inside the reserves.

Surveys and Working-Plans.

4. No information has been recorded in the Report regarding surveys and working-plans. His Excellency in Council understands that maps of all or most of the Reserves are available, which will be sufficient for the working of the latter for some time to come, and that detailed and systematically drawn up working-plans for a number of years are not at present an urgent requirement in the Central Provinces. It appears, however, that annual plans of operations are not yet prepared for the guidance of the District Forest Officers during the year, and I am to suggest that such plans should in future

be furnished. Without these the work must be more or less haphazard, while their existence would ensure much more systematic working and progress. The plans should ordinarily be prepared by the District Forest Officers some time before the commencement of the year, or in connection with the preparation of the annual Budget, and, after having been approved by the Deputy Commissioner of the district, should be finally sanctioned by the Conservator. In the case of the Conservator and Deputy Commissioner being unable to agree, the points at issue should be referred by the Conservator for your orders.

It will also be useful to show in an appendix to the Annual Report what the principal provisions of the annual plans of operations were, and how far they have been carried out.

Protection of the Forests.

5. The breaches of the forest rules brought to notice during the year were as follow:—

Class of Reserves.	Number of Cases.		
	Taken into Court.	Compounded.	Total.
First Class Reserves	30	467	497
Second ditto	605	8,454	9,059
Total in 1882-83 ...	635	8,921	9,556
Total in 1881-82 ...	800	8,428	9,228
Increase in 1882-83	.....	493	328
Decrease ditto	165	.....	.....

Fewer cases were taken into Court, but more were compounded; while the total number shows a slight increase, which appears to be due to more complete returns having been submitted than in the previous year. On the whole, one forest offence has, on an average, been committed in every two square miles of forest under the control of the Department. The results of forest protection during the year are considered satisfactory. The practice of killing trees by girdling, with the view of removing them afterwards as dead wood, mentioned in paragraph 56 of the Report, should be put down by stringent watchfulness and by adequate punishment of the offenders.

6. The areas under fire protection were practically the same as those in the previous year, and the results were as follow:—

Class of Forests.	Area, in Square Miles.			Cost per Area successfully protected.	
	Attempted	Failures.	Proportion of Failures to Area Attempted, in per cent.	Per square mile, in Rupees.	Per acre, in Pies.
First Class Reserves	1,356	22	2	11	3
Second ditto	70	14	20	15	5
Total in 1882-83	1,426	36	3	11	3
Total in 1881-82	1,426	204	14	11	3

These data show that the results were much more favourable in 1882-83 than in the preceding year, while the cost per acre successfully protected was the same. On the whole, the results are very satisfactory, and it is hoped that the improvement effected during the year will be lasting.

Cattle-grazing.

7. Cattle-grazing is prohibited in forests which are under fire protection, and in which improvement cuttings have lately been carried out. The information given in paragraph 95 of the Report is not very precise, but, if the data have been correctly understood, it appears that the closed areas were as follow :—

Class of Forests.	Area, in Square Miles.			Proportion of Area closed against Grazing to Total Area, in per cent.
	Total.	Protected against Fire.	Closed against Grazing.	
First Class Reserves	2,593	1,356	809	31
Second ditto	16,837	70	5	.....
Total	19,430	1,426	814	4

It will be observed that the area closed forms only a very small portion of the total area of Reserves, while it amounts to little more than one-half of the area protected against fire. Taking these facts into consideration, His Excellency in Council agrees with you that the success of fire protection should not be risked by permitting cattle-grazing in the blocks so protected, wherever the opening is likely to be followed by fires. The numbers of cattle admitted into the Reserves during the year, as far as the data can be given, were as follow :—

Kind of Cattle.	In first class Reserves.	In second class Reserves.	Total.
Buffaloes	27,459	198,369	225,828
Cows and Bullocks	132,227	1,501,326	1,633,553
Sheep and Goats	6,983	333,547	340,530
Ponies and Donkeys	54	2,058	2,112
Camels	74	156	230
Total ...	166,797	2,035,456	2,202,253
Average area in acres per head of cattle ...	10	5	6

The bulk of the cattle consists of cows and bullocks. If it is remembered that very extensive private grazing grounds, amounting to upwards of 35,000 square miles, exist in the Central Provinces, it appears surprising that such large numbers of cattle should be brought to the Reserved Forests.

Reproduction of the Forests.

8. His Excellency in Council concurs in the remarks made by you in paragraph 8 of the review of the Report, regarding the renewal of the forests. This must be chiefly effected by protection against fire and, where necessary, against grazing. As soon, however, as the final demarcation of the reserves is well advanced, the artificial stocking of blanks, especially near the boundaries of the fire-protected blocks, should be considered.

Working of the Forests.

9. Only a comparatively small portion of the produce derived from the forests is removed by Government agency. During the year under review it represented 8 per cent. of the Receipts of the Department, and the operations are practically restricted to the working of the Banjar Valley and Ahiri forests, which are the two best sâl and teak forests in the Central Provinces. The cuttings are chiefly made with the view of improving these forests and bringing into the market material, much of which would otherwise not be available. Very large quantities are removed from the Reserves by purchasers under various systems, of which the license system is the most important.

It has not been possible to give the quantities of timber and fuel in a uniform measure, but it is hoped that an attempt will be made to do this in the Report for 1883-84.

Financial Results.

10. The financial results of the year were as follow :—

Class of Forests.	Receipts.	Charges.	Surplus.	
			Total.	Per square mile of Forests.
	Rs.	Rs.	Rs.	Rs.
First Class Reserves	1,87,130	1,78,879	8,251	3
Second ditto	7,90,517	2,33,369	5,57,148	33
Total of 1882-83 ...	9,77,647	4,12,248	5,65,399	29
Total of 1881-82 ...	11,72,884	4,97,013	6,75,871	35
Decrease in 1882-83	1,95,237	84,765	1,10,472	6

The falling off under both Receipts and Charges is due to reductions of the departmental timber operations. Apart from these items, the Receipts have actually increased, while the Charges are about the same as in the previous year. Although the total results do not compare favourably with those of 1881-82, the Surplus is slightly higher than the average of the last five years, and in so far the results are not unsatisfactory.

11. On the whole, the operations of the Department have been conducted on the same lines as in previous years. It is noticed that the suggestions and proposals made by the Inspector-General of Forests, in his Report of 1883, on Forest Administration in the Central Provinces, are now under your consideration, and His Excellency in Council will be glad to hear, at an early date, of the conclusions which you may have arrived at regarding them. Your review of the Conservator's Report merits the approbation of His Excellency the Governor General in Council.

Appendix showing the discrepancies noticed in the statements appended to the Report of Forest Administration in the Central Provinces for 1882-83.

Form No. 51.

(Forest tracts protected from fire.)

In the Report for 1881-82 the total cost of fire protection up to the 30th June 1882 was entered as Rs. 1,28,160-2-1, whereas in the present Report it is given as Rs. 1,28,158-7-5.

Form No. 61.

(Sale of timber and other produce cut and collected by Government agency.)

The entries in the "Abstract of the Circle" under the head "Sold locally" do not in all instances agree with the detailed items of the statement.

Form No. 63.

(Timber and other produce cut, collected, and removed from the forests by consumers or purchasers, including pasture.)

The addition of the figures in the column "Amount actually realized during the year" gives a Grand Total Revenue, under Revenue head II, of Rs. 5,56,202-0-5. This amount does not, however, agree with the sum entered against that head in form No. 53 (Summary of Revenue and Expenditure), which is Rs. 8,69,065-7-6.